DRŽAVNI ZAVOD ZA STATISTIKU CROATIAN BUREAU OF STATISTICS

Quarterly National Accounts Inventory

Croatia

IPA 2011 Multi-beneficiary Statistical Co-operation Programme

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0. INTRODUCTION

The aim of this document is to provide a description of data sources and compilation methods, which are used for quarterly national accounts (QNA) in Croatia. The main purpose is to enable assessment of observance with the European national accounting standard (ESA 2010) and related legislation.

National Accounts (NA) are the most important element of macro-economic statistics. In each country, NA must be of high quality and harmonised with EU requirements in order to offer a solid basis for domestic decision making and comparison with other countries.

As an integral part of the system of national accounts, using the same principles and definitions, quarterly national accounts (QNA) aim to provide a measure of quarterly changes in macroeconomic aggregates.

The quarterly national accounts (QNA) play a central role in assessing the performance of the economy in the recent past and providing the basis for forecasting the economy's future performance.

Quarterly national accounts provide a comprehensive and consistent set of statistics that allows economists and other analysts to undertake detailed assessments of the recent performance of the economy in terms of production, final expenditures and income.

Over time, the role of the quarterly national accounts has assumed greater importance and the demands put on them have increased in a number of different ways: the demand for greater timeliness, the demand for greater accuracy, the demand for greater scope, the demand of greater consistency and comparability. For some countries, the compilation of quarterly national accounts represents the main national accounts activity.

Gross domestic product is one of the most important macroeconomic indicators coming out of national accounts. Gross domestic product measured at constant prices is a very important indicator of measuring the dynamics and level of economic development excluding the influence of prices.

The Description of sources and methods of quarterly national accounts, primarily gross domestic product, has been written according to the requirements of the IPA 2011 project during 2013-2014. This document represents to large extend an updated version of the Description of sources and methods written under IPA 2007 and IPA 2009.



1. OVERVIEW OF THE SYSTEM OF QUARTERLY NATIONAL ACCOUNTS

1.1. ORGANISATION AND INSTITUTIONAL ARRANGEMENTS

Quarterly and annual national accounts are compiled by the Central Bureau of Statistics -Economic Statistics Directorate. The Economic Statistics Directorate calculates the GDP/GNI figures in accordance with the UN System of National Accounts (SNA 93) and the European System of National Accounts (ESA 95) manuals.

In the September 2014 the Central Bureau of Statistics is going to produce annual time series of GDP/GNI for the period 1995 to 2013 and quarterly time-series for the period 2000Q1 to 2014Q2 according to ESA2010.

GDP is calculated according to three approaches: production, expenditure and income approach. The production approach is a leading one because of more reliable data sources and better coverage. The expenditure approach is the leading one in constant price estimation due to the very detail process of deflation it enables.

The Central Bureau of Statistics (CBS) has been compiling quarterly GDP since 1999. In the compilation of the quarterly GDP, two methods are used: direct methods (administrative data sources and surveys) and indirect methods (indicators).

There is no separate organisational unit for quarterly national accounts. In total, 6 persons are included in the quarterly GDP calculation, 3 from the production and income side and 3 from the expenditure side. They are responsible for quarterly as well as annual GDP calculations. They are organised in two separate departments: GDP production and income approach and GDP expenditure approach.

GNI data is compiled in the Sector Accounts Department as is employment data, both annually and quarterly.



1.2. PUBLICATION TIMETABLE, REVISIONS POLICY AND DISSEMINATION OF QNA

The quarterly GDP are published on the website <u>www.dzs.hr</u>, following the First Releases, National Accounts. The quarterly GNI data as well as quarterly employment data are not published yet in the Republic of Croatia but are regularly sent to Eurostat.

The Central Bureau of Statistics publishes the flash estimate of the quarterly gross domestic product since the second quarter of 2009. This estimate is published 58-60 days after the end of the quarter (usually the last Friday). It is a result of the effort of the Central Bureau of Statistics to shorten the period between the collection and publication of statistical data by further harmonisation with EU publishing standards as stipulated by one of the main principles of official statistics, namely the one related to timeliness.

The GDP flash estimate is one of the most important macroeconomics indicators. By making the flash estimate of the quarterly gross domestic product available to users, their better quality decision making in economic, demographic and social areas will be enabled.

It should be noted that the T+60 days publication that is called "flash" is not really a flash procedure that is followed in many countries to come to initial estimates at T+45, but already more or less based on similar data sources as the first release at T+70 days time. During the IPA 2011 project-QNA it was recommended to drop the term "flash" (the Croatian term is already the correct one - First estimate). The term are going to be changed at the end of the IPA 2011-QNA project because the Croatian GDP flash estimate is not an econometric indicators based estimate but is already a full calculation using the direct and indirect approach methods.

Second estimates for quarterly GDP are published after the end of reference quarter within the T+70 days deadline. Following the end of the reference year T, the initial estimates for the preliminary annual GDP (as sum of fourth quarters) are published with a 2 months delay.

External users can obtain the Quarterly GDP data on the official Central Bureau of Statistics website in the form of a press release and excel tables. The release presents data series on Quarterly GDP for the period from the first quarter of 2000 to the last obtained quarter for the Republic of Croatia by major categories of expenditure and economic activities of the NACE 2007. The data are presented at current prices, constant previous year prices, constant prices with reference year 2005 (2005 = 100) and volume indices (comparison with the corresponding quarter of the previous year).

During 2013 a working group for the formulation of a revision policy has been established, for the purpose of creating a unified revision policy. Members of the working group are



representatives from the Croatian National Bank, the Ministry of Finance and Central Bureau of Statistics.

1.3. QNA COMPILATION APPROACH

Two methods are used for quarterly GDP calculation: the production and the expenditure method. GDP by expenditure approach is presented at market prices and GVA by activities at basic prices.

At the Central Bureau of Statistics, the quarterly GDP estimation by production approach is primarily an indicators based system, where the quarterly GDP at current and constant prices are produced by extrapolation of previous year value added using value and volume indicators.

GDP by expenditure approach in current prices is primarily based on direct data sources such as: regular monthly and quarterly Central Bureau of Statistics surveys, Ministry of Finance GFS data, Balance of Payment data (Croatian National Bank) and other administrative data sources.

As the production approach, due to more reliable and exhaustive data sources, is taken as a benchmark, the discrepancy on the expenditure side is calculated as a residual. The statistical discrepancy appears only on the expenditure side, and it comes from the balancing process between production and expenditure sides in current prices. The statistical discrepancy is not published separately, but together with changes in inventories.

The supply-use framework is currently not used in the balancing process.

GDP by expenditure approach in constant prices are calculated by dividing current values with apropriate price indices. Only a few items are calculated by extrapolation with volume indexes.

1.4. BALANCING, BENCHMARKING AND OTHER RECONCILIATION PROCEDURES

In order to ensure data quality of the GDP components, analytical and logical controls, crosschecks and comparisons between the various data sources are carried out as part of the compilation.



In practice, the balancing of quarterly GDP by the production approach and quarterly GDP by the expenditure approach is conducted in the following way: as the quarterly GDP according to the production approach is considered more reliable, the quarterly GDP obtained by the expenditure approach is adjusted to it. The expenditure side quarterly GDP is therefore derived directly from the production side quarterly GDP. The sum of all expenditure components, including changes in inventories, has thereby been matched to the overall quarterly GDP by production. The residual as absorbed on the expenditure side is the statistical discrepancy.

The income approach is not involved in the balancing process because gross operating surplus (including mixed income) is derived as a residual item.

The estimate of the annual provisional data is obtained by summing up four quarters (T+70 days after reference year). However, the final annual estimate is calculated using more reliable data sources. The Annual GDP (AGDP), on the basis of the production approach, is calculated at a more detailed breakdown than the quarterly one, at 60 NACE 2007 divisions (NACE 2007 is fully compatible with NACE Rev.2) - see Table 3, sub-heading 1.3.0 in Inventory of AGDP/AGNI, whilst quarterly GDP is calculated according to the structure required in the ESA Table 0101 from the European Transmission Programme (ETP). The Annual GDP has been calculated at current prices, constant previous year prices and chain linked volumes (reference year 2005=100). Quarterly GDP is calculated at current prices, constant previous and chain linked volumes (reference year 2005=100).

Adjustment of quarterly GDP figures, according to the revised annual data for the period from 2000 to 2013, was carried out by using the Denton method of the ECOTRIM program. The ECOTRIM program has been developed by Eurostat, and provides a set of mathematical and statistical techniques which are used for temporal desegregation of data series.

1.5. VOLUME ESTIMATES

The quarterly time series at constant prices are expressed at prices of the previous year, by dividing current prices by indices expressed in average prices of the previous year. Basic chain-linked indices are calculated from the time series at prices of the previous year, linking them to the reference year 2005 (2005 = 100). Real growth rates are calculated by using the series of chain-linked indices.



For the chain-linking procedure, the annual overlap method is applied, which is the only method where the annual growth rate (i.e. current year compared to previous year) equals the simple mean of the four quarterly growth rates.

1.6. SEASONAL ADJUSTMENT AND WORKING DAY CORRECTION

In Croatia seasonally adjusted series of quarterly GDP and its components are available for all three methods of calculation: production, expenditure and income (Table 0101, 0102 and 0103).

Also included in seasonal adjustment are time series on national disposable income (Table 0107) and number of persons employed (Table 0110).

Working-days correction (calendar adjustment) is performed for all quarterly NA series which are seasonally adjusted. The revision of statistical models for seasonally adjusted series is performed only when raw data are revised.

1.7. ADDITIONAL INFORMATION

The main page related to quarterly GDP in the Republic of Croatia can be found at:

http://www.dzs.hr/default_e.htm

Regular electronic publications can be downloaded from:

http://www.dzs.hr/default_e.htm

Complete time series of quarterly GDP can be downloaded from:

http://www.dzs.hr/default_e.htm



2. PUBLICATION TIMETABLE, REVISIONS POLICY AND DISSEMINATION OF QNA

2.1. RELEASE POLICY

The publication timetable is determined by the Statistical Calendar for a particular year. External users can find the Statistical calendar on the Central Bureau of Statistics website and in published form.

An official release calendar is available on the Central Bureau of Statistics website approximately two months before the beginning of the respective year. The calendar of national accounts releases in 2014 can be found at: http://www.dzs.hr/default_e.htm

First estimate of quarterly GDP are released four times per year at T+58-60 days time after the end of the quarter (on the last Friday). Second estimates of quarterly GDP data are released four times per year at T+70 days time after the end of the quarter.

In line with the revision policy, the previously issued quarterly data for the particular period have been harmonized with the published annual GDP.

The next table breafly presents the revisions of quarterly time series according to final annual data in the last years:

	Period	Published
1. Annual time series	1995-2005	28. January 2009
Quarterly time series	2000Q1-2008Q3	27. February 2009
2. Annual time series	1995-2007	23. December 2010
Quarterly time series	2000Q1-2010Q4	31. March 2011
3. Annual time series	1995-2009	3. May 2012
Quarterly time series	2000Q1-2012Q1	10. June 2012
4. Annual data	2010	14. Februar 2013
Quarterly time series	2000Q1-2012Q4	10. March 2013
5. Annual data	2011	10. December 2013
Quarterly time series	2000Q1-2013Q3	10. December 2013



2.2. CONTENTS PUBLISHED

Press Release "First Quarterly Gross Domestic Product estimate" at T+60 days time

External users can obtain the quarterly GDP first estimate on the official Central Bureau of Statistics website in the form of a Press release.

The contents published are:

- 1. Volume index for a particular quarter (Q/Q-4), as well as
 - a. Largest positive contribution to GDP volume index by type of expenditure and economic activities
 - b. Largest negative contribution to GDP volume index by type of expenditure and economic activities
- 2. Annual provisional volume index (sum of fourth quarters) at T+60 days time after the end of the year, as well as
 - a. Largest positive contribution to GDP volume index by type of expenditure and economic activities
 - b. Largest negative contribution to GDP volume index by type of expenditure and economic activities

Release "Quarterly Gross Domestic Product estimate" at T+70 days time.

External users can obtain quarterly GDP data on the official Central Bureau of Statistics website in the form of a regular release and contained in Excel tables.

The following tables are published in each quarterly release and can be downloaded in Excel form:

Table 1.1 GDP by expenditure approach at current prices

Table 1.2 GDP by expenditure approach at constant previous year prices

Table 1.3 GDP by expenditure approach, at constant previous year prices, real growth rates, comparison with corresponding quarter of previous year

Table 1.4 GDP by expenditure approach at constant previous year prices, 2005 reference year



Table 2.1 GVA and GDP by production approach at current prices

Table 2.2 GVA by production approach at constant previous year prices

Table 2.3 GVA by production approach at constant previous year prices, real growth rates, comparison with corresponding quarter of previous year

Table 2.4 GVA by production approach at constant previous year prices, 2005 reference year

The following quarterly tables of the ESA95 Transmission Programme are published at T+70 days after the end of the reference quarter:

Table 0101: Gross value added at basic prices and gross domestic product at market prices (gross value added is published in A10 breakdown). All time series are available from the 1st quarter 2000, only figures at previous year prices and chain-linked series are available from the 1st quarter 2001.

Table 0102: Gross domestic product at market prices by the expenditure approach (without breakdown of gross fixed capital formation). All time series are available from the 1st quarter 2000, as well as figures at previous year's prices and chain-linked series.

Transmition tables 0103, 0107 and 0110 are regulary sent to Eurostat but not published in the Republic of Croatia at the moment.

2.3. SPECIAL TRANSMISSIONS

Croatia subscribes to the SDDS Special Data Dissemination Standard database (IMF).

2.4. POLICY FOR METADATA

QNA of the Republic of Croatia subscribes to the Special Data Dissemination Standard (SDDS) established by the International Monetary Fund (IMF). Metadata related to national accounts can be found at:

http://www.hnb.hr/dsbb/edsbb.htm



3. OVERALL QNA COMPILATION APPROACH

3.1. OVERALL COMPILATION APPROACH

Quarterly current price data on gross output have been obtained from the quarterly surveys of enterprises received from the Financial Agency (FINA) untill the first quarter of 2013. Since then the main data sources are quarterly and monthly CBS surveys as well as data from the Tax Administration Office.

The calculation of the GVA at current and constant prices is mainly based on data obtained from regular surveys of the Croatian Bureau of Statistics, the Croatian National Bank, the Ministry of Finance, the Croatian Financial Services Supervisory Agency, the Croatian Post and Electronic Communications Agency and the Croatian Institute for Pension Insurance.

Tax Administration data on taxable and non-taxable values of goods and services is also used in the process of value added estimation next to data from different surveys.

Gross value added is derived directly by using indicators for output, such as production or turnover, to extrapolate value added. For constant prices the base is the current price value of year t-1. These are multiplied with various indicators expressed as indices based on the average of the previous year. Current price values of the respective quarter are then obtained by inflating the same quarter in constant prices with appropriate price indices expressed with respect to the average of the previous year as well.

The calculation of value added at current and constant prices based on various indicators is carried out at the 2-digit , 3-digit or 4-digit NACE 2007 levels for most of the activities. Input indicators (number of employed persons in most cases) at the 4-digit NACE 2007 level are used for extrapolation of service activities.

Data on taxes and subsidies on products are taken over from the data of the Ministry of Finance.

The GDP at market prices is derived from GVA at basic prices by adding taxes less subsidies on products.

The compilation of the GDP according to the expenditure approach at current prices is based on data from regular surveys of the Croatian Bureau of Statistics, the Ministry of Finance, the Croatian National Bank, the Financial Agency and other administrative data sources.



Final consumption expenditure of households is compile from regular surveys of the Croatian Bureau of Statistics on turnover data for retail trade and for hotels and restaurants. Data on resident consumption abroad and non-resident consumption in Croatia are taken from the Balance of Payments.

The list of services consumed by households is extensive. They are compiled as follows. Imputed rent is extrapolated from previous year values by using volume indices from the production approach as well as implicit deflators. Expenditures of transport services are extrapolated from previous year values by using volume indices (passenger-kilometers) and appropriate consumer price indices (CPI). Expenditure on other services, which are still not covered by regular surveys of the Croatian Bureau of Statistics, are extrapolated from the previous year values by using volume indices (number of employees) and appropriate consumer price indices (CPI).

Government final consumption expenditure is compiled according to the cost method. The main data sources are annual government final consumption expenditure and quarterly government finance statistics data (provided by the Ministry of finance every quarter). The difference between the accrual and the cash concepts was estimated. Therefore, final data were presented according to the accrual concept. Additional data sources are the Quarterly Statistical Report on revenues and expenses of Budget and Budgetary Users (PR-RAS).

The non-profit institutions serving households expenditure (NPISH) are calculated by using the Report of revenues and expenses of non-profit institutions (PR-RAS-NPF) for the components of the final consumption expenditure of NPISH (annual calculations), Insured persons – pension scheme (four-digit NACE 2007), Average monthly gross earnings of persons in paid employment, Consumer price indices, Industrial producer price indices of the domestic market. Additional data source is the Quarterly Statistical Report on Income and Expenditures of Non-Profit Organizations.

Gross fixed capital formation is compiled by means of a commodity flow method, using data for production and import of capital goods and construction works. An additional data source is the Quarterly Statistical Report. This report has been introduced since the first quarter of 1999 and covers five different groups of legal entities: enterprises, insurance companies, banks and other financial institutions, non-profit organisations and budgetary users. The statistical surveys were canceled in the beginng of 2013 due to high cost. Changes in inventories are calculated by using data from the Quarterly Statistical Report on Business Results of Entrepreneurs. The statistical discrepancy is included in this category (this is the difference between GDP by the production and GDP by the expenditure approach).



Import and export of goods and services are based on the Balance of payments data of the Croatian National Bank.

The income approach is not involved in the balancing process because gross operating surplus (including mixed income) is derived as a residual item.

3.2. BALANCING, BENCHMARKING AND OTHER RECONCILIATION PROCEDURES

Analytical framework, concepts, definitions and classification

Gross domestic product at market prices expresses the value of all goods and services of resident units. GDP by production method equals gross output at basic prices less intermediate consumption at market prices plus taxes on products and minus subsidies on products. Gross domestic products by income approach equals the sum of compensation of employees, net taxes on production (taxes on production less subsidies on production), gross operating surplus and mixed income. By expenditure approach, gross domestic product equals the total domestic consumption and difference between export and import of goods and services with the rest of the world.

The classification of business entities by activities is in line with the NACE 2007, which is directly comparable to the NACE Rev. 2 classification. The product classification, which is used for the calculation of GVA in current and constant prices by activities, is harmonised with the National Nomenclature of Industrial Products and Services, which is comparable to the PRODCOM classification.

For GDP at current and constant market prices by expenditure categories, the following classifications are used: the Classification of Individual Consumption by Purpose (COICOP), the Standard International Trade Classification (SITC), the Central Product Classification (CPC) and NACE 2007.

GDP estimates include all activities within the ESA 95 production boundary and cover the total territory of the Republic of Croatia. The estimates are prepared on an accrual basis.

Benchmarking of Quarterly GDP to and Annual GDP

The process of alignment of quarterly data to annual ones is done by a benchmarking technique once a year when annual data become final.



The adjustment of quarterly GDP values to final annual data is carried out by using the Denton method of the ECOTRIM programme. The ECOTRIM programme has been developed by Eurostat, and provides a set of mathematical and statistical techniques which are used for temporal disaggregation of data series.

During the process of adjustment, the discrepancy between estimated quarterly data and final annual data is minimised. The result is the achievement of consistency between quarterly and annual data, that is, the sum of quarterly data is equal to annual data for every year.

Revision policy

Currently in the Central Bureau of Statistics there is no official revision policy for quarterly data. Every time when annual time series is published quarterly time series were adjusted to the annual ones. The next one take place in September 2014. Central Bureau of Statistics plan to published revised quarterly time series 2000Q1-2014Q2 according to revised annual time series 1995-2013 (ESA2010). The next table breafly presents the planed revisions of quarterly time series according to the annual ones in 2014:

	Period	Publishing dates
1. Annual data	2012	10. June 2014
Quarterly time series	2012Q1-2014Q1	10. June 2014
2. Annual time series	1995-2013	10. September 2014
Quarterly time series	2000Q1-2014Q2	10. September 2014

Croatia has prepared three large revisions of the whole data series, both annually and quarterly, in the past few years.

1. <u>The first revision</u> was a major statistical revision carried out in 2008 of which results were published in January 2009. This revision improved the coverage and quality of estimates due to new data sources and calculation methods used. This revision included three main parts: inclusion of missing corrections for the non-observed economy, a new improved method for owner occupied dwellings in order to get a better estimation of imputed dwelling rents and a new improved calculation and allocation of FISIM.

The next table breafly presents the revision of quarterly time series according to the annual ones in 2009.



	Period	Published
1. Annual time series	1995-2005	28. January 2009.
Quarterly time series	2000Q1-2008Q3	27. February 2009.

The GDP calculation by the production approach has been improved by the inclusion of the non-observed economy, the new estimation of imputed rents and the new estimation of FISIM. The expenditure GDP components were revised in line with the production side of the GDP revision. The corrections were made for the imputed rents, for FISIM allocation and for the non-observed economy.

The effect of this revision at the overall GDP level in the observed period ranges between 14.2% and at most 17.7% of the nominal GDP change. The growth rates of the revised GDP do not significantly differ from so far published figures.

The largest impact to corrections of GDP had a part that refers to the estimation of the nonobserved economy. It makes about 2/3 of the overall GDP corrections throughout the whole period. The remaining 1/3 of the overall corrections belong to the two GDP elements that were calculated according to the new ESA 95 methodology, imputed rents and financial intermediate services indirectly measured (FISIM).

Also, for the first time, the chain-linking method had been applied in the calculation of GDP at constant prices. Before the revision, constant prices time series were presented in base year prices (1997 = 100). Apart of the revision, quarterly time series at constant prices were now expressed in prices of the previous year, by dividing current prices by indices expressed in average prices of the previous year. Chain-linked indices were calculated by using the time series at prices of the previous year, with linking to the reference year (2000=100).

Quarterly time series data were presented at current prices, constant previous year prices and constant previous year prices, reference year 2000 (2000 = 100). For the chain-linking procedure, the annual overlap method was applied, where the annual growth rate (current year compared to previous year) equalled the simple mean of the four quarterly growth rates. Real growth rates are calculated by using basic chain-linked indices.

2. The second revision took place in 2010. CBS carried out a minor revision consisting of seven areas of methodological improvements: 1) the inclusion of consumption of fixed capital of government non-marked producers, 2) the inclusion of the results of the Economic Accounts for Agriculture into national accounts as a replacement of previously used simple calculations, 3) the valuation of the insurance output in line with the ESA 95, 4) the valuation of the output of non-market producers, who satisfy the 50% rule of the ESA 95, 5) the inclusion of the production of software for own account, 6) the verification of the size of



cross-border flows of compensations of employees by using the number of employees and provision of correct valuation including taxes and social contributions, 7) a review of all taxes on production and a comparison of VAT assessed with time-adjusted VAT payments. Results were published in December 2010.

The next table breafly presents the revision of quarterly time series according to the annual ones in 2011.

	Period	Published
2. Annual time series	1995-2007	23. December 2010.
Quarterly time series	2000Q1-2010Q4	31. March 2011.

The effect of this minor statistical revision at the GDP level in nominal terms was the average increase of 0.4% throughout the whole period. Since a better quality and more exhaustive data sources were available for the period from 2000 to 2007, the GDP in nominal terms increased by 0.8% in that period. The largest impact to corrections of GDP had a part that refers to the improvement of the calculation of taxes and new calculation of consumption of fixed capital. On the other hand, the greatest impact to the decrease of GDP was due to a decrease in agricultural production according to the new calculation.

The effect of this minor statistical revision at GDP in real terms ranged between the greatest increase of 0.72% in 2000 and the lowest one of -0.56% in 2002.

<u>3. The third revision</u> took place in 2012 when CBS implemented NACE Rev. 2. The GDP time series were revised from 1995 onwards. Results were published in May 2012.

The time series on quarterly gross domestic product (GDP) according to new version of economic activities, National classification of activity 2007. (NACE 2007) was published for the first time in June 2012. Revised data were presented for the period from the first quarter of 2000 to the first quarter of 2012.

The next table breafly presents the revision of quarterly time series according to the annual ones in 2012.

	Period	<u>Published</u>
3. Annual time series	<u>1995-2009</u>	<u>3. May 2012.</u>
Quarterly time series	<u>2000Q1-2012Q1</u>	<u>10. June 2012.</u>

The time series on quarterly final consumption expenditure of non-profit institution serving households (NPISH) were published separately for the first time. Until then data were published together with data on final consumption expenditure of the general government. Revised data were presented for the period from the first quarter of 2000 to the first quarter of 2012.



3.3. VOLUME ESTIMATES

For the compilation at constant prices, various indicators from regular surveys of Central Bureau of Statistics are used as well as data from other institutions. Appropriate volume indices at constant prices are used for compilation in agriculture, forestry and fishing activities, industrial production, construction, trade, hotels and restaurants, transport, communication and financial activities. The calculation is done at the 2-, 3- and 4-digit NACE 2007 levels.

Input indicators (number of employed persons in most cases) at the 4-digit NACE 2007 level are used for most other service activities.

Individual components of the GDP by expenditure categories at constant prices are calculated by deflating current market price data, using indices at prices of the previous year.

Data on household consumption at constant prices are calculated by using appropriate CPI sub-indices. Deflation takes place at very detailed level.

With respect to government expenditures and expenditures for non-profit institutions serving households, an assumption of constant productivity has been applied so that the wage and salary indices at constant prices can be calculated by dividing the data on current expenditures on wages and salaries by indices of the number of persons employed. Expenditures on other goods and services were deflated by using appropriate CPI sub-indices and industrial producers' price indices.

Gross fixed capital formation data are deflated by domestic PPI indices for capital goods and by foreign countries PPI indices on non-domestic market for imported capital goods and by the implicit deflator for construction by the production approach.

Changes in inventories of final goods and work in progress is deflated by prices of industrial products. Changes in inventories of raw materials are deflated by industrial producers' price indices and import prices of raw materials. For the deflation of changes in inventories of goods purchased for resale, a relevant CPI is used.

Export of goods is deflated by using Industrial producer price indices on the non-domestic market (after 2011) and Fisher-type unit value indices (before 2011). Imports of goods is deflated by using foreign countries Industrial producer price indices on the non-domestic market (after 2011) and Fisher-type unit value indices (before 2011).



The deflation of exports of tourist services is based on the use of appropriate price indices of the CPI using the structure of tourist consumption as weights. Deflation of imports of tourist services is based on the use of the CPI of the destination countries of residents, using exchange rates and using the structure of tourist consumption as weights.

Exports of other services are deflated using relevant consumer price indices-services. Imports of other services are deflated using HICP-EU, taking into account exchange rate.

3.4. SEASONAL ADJUSTMENT AND WORKING DAY CORRECTION

Seasonal adjustment and working-days correction

In Croatia seasonally adjusted series of quarterly GDP and its components are available for all three methods of calculation: production, expenditure and income. Also included in seasonal adjustment are time series about national disposable income (Table 0107) and number of persons employed (Table 0110).

Working-days correction (calendar adjustment) is performed for all QNA series which are seasonally adjusted. A revision of statistical models for seasonally adjusted series is performed only when raw data are revised.

Coverage of adjusted and published figures

Breakdown and level of detail is in accordance with the Transmission Programme. The following tables of ESA95 Transmission Programme are currently adjusted and sent to Eurostat:

- Table 0101 Gross value added at basic prices and gross domestic product at market prices
- Table 0102 GDP identity from the expenditure side
- Table 0103 GDP identity from the income side
- Table 0107 Disposable income, saving, net lending / borrowing
- Table 0110 Population and employment

With respect to tables 0101 and 0102, separate seasonal adjustment is carried out for current prices (label "V") and for constant previous year prices, reference year (2005=100), after chain-linking (label "L"). The remaining tables (0103, 0107 and 0110) are produced in current prices only (label "V") and, due to that reason, only series in current prices are seasonally adjusted.



Method of adjustment

The TRAMO-SEATS method is used as implemented in Demetra version 2.2 (release year: 2008) for all series in QNA. The choice between additive and multiplicative models is performed by using built-in test in TRAMO-SEATS.

Time consistency

At present, seasonally and working-days adjusted quarterly data are not consistent with the annual non-adjusted data.

Accounting consistency

At the Croatian Bureau of Statistics, GDP is seasonally adjusted by the direct method. The calculation of quarterly GDP by the production approach is considered to be more reliable due to the existence of exhaustive data sources and a very detailed level of calculation. Due to that reasons, discrepancies between GDP according to three computation methods is allocated to the changes in inventories on the expenditure side and to the gross operating surplus and mixed income on the income side.

Revision policy

Currently at CBS there is no official revision policy for seasonally adjusted data. Statistical models for seasonal and working-days adjustment are changed when a new base year is adopted and when the coverage of certain variables changes.

Policy for working-days correction

Currently working-days (calendar) adjustment is performed for all time series which are also seasonally adjusted. The Croatian calendar of national holidays has been defined and is used in Demetra 2.2. Two regressors are used in TRAMO-SEATS: working days (as opposed to non-working days) and Easter effect. The significance of six Easter days is tested for every single series. The Leap year effect is considered not to be important for QNA series and consequently this type of adjustment is not carried out.



4. GDP COMPONENTS: THE PRODUCTION APPROACH

For the calculation of quarterly gross domestic product (QGDP), Central Bureau of Statistics uses the following approaches: the production approach, the expenditure approach and the income approach. The calculation of quarterly GDP by the production approach is considered to be more reliable due to the existence of exhaustive data sources and a very detailed level of calculation.

Quarterly GDP is calculated solely as value added (QGVA) without calculating gross output and intermediate consumption. The quarterly estimates of taxes and subsidies on products are added to the estimation of QGVA in order to obtain QGDP at market prices.

The classification of business entities by activities is in line with the NKD 2007, which is directly comparable to the NACE Rev. 2 classification. The product classification, which was used for the calculation of GVA in current and constant prices by activities, is harmonized with the National Nomenclature of Industrial Products and Services, which is comparable to the PRODCOM classification.

The calculation is done at the 2-, 3- or 4-digit NKD 2007 levels.

4.1. GROSS VALUE ADDED

The calculation of the GVA at current and constant prices is mainly based on data obtained from regular surveys of the Croatian Bureau of Statistics, the Croatian National Bank, the Ministry of Finance, the Croatian Financial Services Supervisory Agency, the Croatian Post and Electronic Communications Agency and the Croatian Institute for Pension Insurance.

Tax Administration data on taxable and non-taxable values of goods and services (source 25 as listed in chapter 10) are also used in the process of value added.

Gross value added is derived directly through using indicators for output, such as production or turnover, to extrapolate value added. For constant prices the base is the current price of year t-1. Current prices of year t-1 are multiplied with various indicators expressed as indices based on the average of previous year. Current prices of respective quarter are then obtained by inflating the same quarter in constant prices with appropriate price indices expressed on the average of previous year as well.



The calculation of value added at current and constant prices based on various indicators is done at the 2-, 3-digit or at 4-digit NKD 2007 levels for most of the activities. Input indicators (number of employed persons in most cases) at the 4-digit NKD 2007 level are used for extrapolation of service activities.

4.1.1. AGRICULTURE, FORESTRY AND FISHING (A)

Calculations of value added for the agriculture, forestry and fishing activities (NKD A) are done separately for agriculture (NKD 01), for forestry (NKD 02) and for fishing (NKD 03).

Main data sources used to extrapolate value added in the agriculture (NKD 01) are indicators based on various monthly and quarterly surveys conducted by CBS's agriculture department. Data on number of livestock and poultry, net weight of livestock and poultry slaughtered in abattoirs (source 1) and indicators of produced and collected cows' milk (source 2) are used for estimation of animal production. For crop production the main data source used is data on actual yields of early crops, early estimates of important early and late crops, estimations of areas of important crops and data on autumn sowing. At the time when first and second prospects for real income in agriculture are available, data are also included in the calculation.

An additional data source is the Economic Accounts for Agriculture- EAA (source 6). The breakdown of the agriculture activity's output is based on EAA data. Data are on an annual basis, and they are included in the compilation process at the time when they become available and especially during the process of reconciliation.

To calculate value added at constant prices, data are extrapolated based on annual current prices for year t-1 using the changes in quantities. Current prices for agriculture activity are obtained using agricultural price indices (source 3) expressed on the average of the previous year.

Data on forestry products and felled timber (source 4) for the reference period are used in the process of extrapolation of value added for forestry (NKD 02). Due to lack of any information on prices, average monthly gross earnings (source 21) are used in order to get current values from the constant prices estimate.

Value added for fishing (NKD 03) is estimated using available quantitative indicators on catched fish and other organisms (source 5) as well as average monthly gross earnings (source 21) as indicator of changes in prices.



4.1.2. MANUFACTURING, MINING, QUARRYING AND OTHER INDUSTRIES (B, C, D, E)

The estimation of gross value added for the activities manufacturing, mining, quarrying and other industries (NKD B, C, D and E) takes place at 2-digit NKD levels.

For the manufacturing industries (NKD B, C and D), value added for the respective quarter in previous years' prices is obtained by the extrapolation based on annual gross value added of the previous year in current prices using the corresponding industrial production volume indices (source 8). Appropriate industrial producer price indices at the 2-digit NKD levels (source 9) are used to calculate value added in current prices.

In the absence of appropriate indicators that would show the movement of gross output either at value or volume changes, for the activity Water supply, sewerage, waste management and remediation activities (NKD E) the number of insured persons (source 23) is used for the extrapolation of value added at constant prices. This input indicator is available at 4-digit level so the estimation at constant prices is done at that level of detail as well. In order to estimate gross value added at current prices for NKD E, two different indicators are used. Appropriate industrial producer price indices (source 9) are used as a deflator for NKD 36 - Water collection, treatment and supply and NKD 37 - Sewerage. For NKD 38 (Waste collection, treatment and disposal activities) and NKD 39 (Remediation activities and other waste management services) corresponding price indices are not available and, due to that fact, the index on average monthly gross earnings for persons in paid employment (source 21) is used as deflator.

4.1.3. CONSTRUCTION (F)

The approach to calculating value added in the construction industry (NKD F) is based on data on construction works (new constructions and reconstructions, maintenance and repair works on existing constructions) done within the territory of the Republic of Croatia. The volume changes of construction works (source 10) are based on the number of hours worked on sites and are used as an indicator for value added in constant prices.

Gross value added for NKD F is calculated at 2-digit NKD levels. Extrapolation of value added at constant prices for NKD 41 (Construction of buildings) is based on the volume indices of construction works for buildings. For NKD 42 (Civil engineering) and NKD 43 (Specialized construction activities) weighted volume indices based on data for total construction work, for buildings and for civil engineering works are used.



Current prices are obtained by inflating the constant price estimates with a price indices based on producer building material price indices (source 11) and with indices based on average monthly gross earnings for persons in paid employment (source 21).

4.1.4. WHOLESALE AND RETAIL TRADE, TRANSPORTATION AND STORAGE, ACCOMMODATION AND FOOD SERVICE ACTIVITIES (G, H, I)

Despite the fact that value added for NKD G, H and I is usually shown at aggregated level, calculations are carried out separately for each of those activities at detailed levels.

Main data sources used for compiling value added in NKD G (Wholesale and retail trade; repair of motor vehicles and motorcycles) are retail trade indices (source 12) and trade and other services' indices (source 13). Estimations are carried out separately for each activity: for NKD 45 - Wholesale and retail trade and repair of motor vehicles and motorcycles, for NKD 46 - Wholesale trade, except of motor vehicles and motorcycles and for NKD 47 - Retail trade, except of motor vehicles and motorcycles.

Turnover indices by main activities of business entities which are based on the quarterly report on trade and other services (source 13) are the main variables used in the process of previous year's prices estimation for the NKDs 45 and 46. Current prices values are obtained by inflating of volume changes with weighted indices composed of appropriate consumer price indices (source 22), industrial producer price indices (source 9) and retail trade price indices of goods (source 12) at detailed level. For retail trade, except of motor vehicles and motorcycles (NKD 47) value and volume indices of retail sales (source 12) as well as price indices are used for the extrapolation of current and constant prices estimates for the respective quarter.

Compilation of value added for Transportation and storage (NKD H) is carried out at 4-digit NKD level due to the availability of a number of different indicators.

For NKD 49 – Land transport and transport via pipelines, estimations are carried out separately for railway transport, for road transport, for urban transport and for transport via pipelines. Constant price estimates for railway transport and for road transport are based on the indicators where the units of measurement are the number of passengers-kilommeters and the number of ton-kilometers carried out by these transport modes. Indicators based onf number of passengers carried by busses and trams are used for extrapolation of constant price estimates for urban transport. For transport via pipelines indicators which measure oil and gas transport are used (source 15).



For NKD 50 - Water transport activities, seawater and coastal transport, indicators are used (source 15) as well as realized inland waterway transport of goods on rivers (source 18). Quantitative indicators on traffic of passengers in airports (source 17) are data sources in the process of gross value estimation for the NKD 51 – Air transport. Indices on realized transport in ton-kilometers in air transport are taken into account as well. Data on the transshipment of goods (source 16) with respective quantitative indicators are the main variables for NKD 52 - Warehousing and support activities for transportation.

The data sources for the calculations for the NKD 53 - Postal and courier activities are based on quarterly reports on postal traffic – quantitative indicators on number of received and posted letter, parcels and other consignments (source 19). Next to these quantitative indicators, data on realized revenues from postal services are also used for the estimation of value added.

Above mentioned quantitative indicators are used in the process of value added estimation in constant prices for division H – Transportation and storage while current prices are obtained by inflating each of those activities at 4-digit NKD level with appropriate consumer price indices (source 22).

Accommodation and food service activities (NKD I) consists of accommodation activities (NKD 55) and food service activities (NKD 56). Value added at current prices for NKD 55 and NKD 56 is based on the turnover indices by main activities of business entities (source 14). Data are matched with other available indicators such as data on turnover of tourists (number of tourist arrivals and tourist nights) and on taxable and non-taxable value of goods and service. Weighted deflators composed of appropriate consumer price indices (on 4- or 5- digit COICOP levels) are used for estimation of value added at constant prices.

4.1.5. INFORMATIONA AND COMMUNICATION (J)

The calculations of value added for NKD J – Information and communication are carried out at 4-digit NKD level and then data are grossed-up at the 2- and 1-digit NKD levels. Main data sources for obtaining value added in constant prices (except for NKD 61.10 – wired telecommunication activities and for NKD 61.20 – wireless telecommunication activities) are input indicators - number of persons in paid employment by activities (source 20) and number of insured persons (source 23).

Value added for NKDs 61.10 and 61.20 is estimated using indicators on the value of telecommunication services in mobile and fixed (immoblie) networks (source 24). Next to these indicators, data on total revenue realised from telephone services in the fixed network



and total revenue realised from telephone services in mobile network are also used for the estimation of value added.

For getting current price estimates, appropriate consumer price indices (source 22) are used if available. Where consumer price indices are not available or not appropriate, deflators are based on average monthly gross earnings data (source 21).

4.1.6. FINANCIAL AND INSURANCE ACTIVITIES (K)

Financial and insurance activities (NKD K) consist of financial services (NKD 64), Insurance, reinsurance and pension funding (NKD 65) and activities auxiliary to financial services and insurance activities (NKD 66). For each of those activities, value added is extrapolated using different indicators.

Value added in constant prices for activity NKD 64 - Financial service activities, except insurance and pension funding is calculated using values of credit institutions' net interest income and net income from commissions and fees (source 26) as indices based on the average of the previous year. In addition to those indicators, number of persons in paid employment by activities (source 20) and number of insured persons (source 23) are used as well. Average monthly gross earnings data (source 21) are used to obtain the current prices in the NKD 64 activities.

Values of gross written premium for non-life insurance and gross written premium for life insurance (source 27) together with number of persons in paid employment by activities (source 20) and number of insured persons (source 23) are used for estimation of value added in constant prices in the NKD 65 - Insurance, reinsurance and pension funding, except compulsory social security. Appropriate consumer price indices (source 22) are used for obtaining the current price estimates.

Due to the lack of appropriate indicators, number of persons in paid employment by activities (source 20) and number of insured persons (source 23) are used for estimation of value added at constant prices for NKD 66 – Activities auxiliary to financial services and insurance activities. Current price estimates at 4-digit NKD level are calculated using average monthly gross earnings data (source 21).



4.1.7. REAL ESTATE ACTIVITIES (L)

The calculations of value added for NKD L – Real estate activities are carried out at 4-digit NKD level and then gross-up to the 2- and 1-digit NKD levels. Data sources for obtaining value added in constant prices are volume indices of construction works for buildings. Next to construction works indices, input indicators - number of persons in paid employment by activities (source 20) and number of insured persons (source 23) are use as well.

Current price estimates are obtained by inflating with weighted indices based on producer building material price indices (source 11), consumer price indices (source 22) and on data on average monthly gross earnings for persons in paid employment (source 21).

4.1.8. PROFESSIONAL, SCIENTIFIC, TECHNICAL, ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES (M, N)

Despite the fact that value added for NKDs M and N is usually shown at aggregated level, calculations are done separately for each of those activities at 4-digit NKD level and then grossed-up to the 2- and 1-digit NKD levels. Input indicators - number of persons in paid employment by activities (source 20) and number of insured persons (source 23) are the main data sources for obtaining value added in constant prices.

Tax Administration data on taxable and non-taxable values of goods and services (source 25) are used as additional data source for the extrapolation of value added for service activities.

Current prices at 4-digit NKD level are calculated using appropriate consumer price indices (source 22) when available. Where consumer price indices are not available or not appropriate, deflators are based on average monthly gross earnings data (source 21). CBS is aware that prices indices play a very important role in the development of good constant price estimates and CBS is therefore currently in the process of developing a methodology for their compilation based on quarterly surveys on prices for a number of different types of service activities (SPPIs sub-indices).

4.1.9. PUBLIC ADMINISTRATION AND DEFENCE, EDUCATION, HUMAN HEALTH AND SOCIAL WORK ACTIVITIES (O, P, Q)

The process of value added compilation at current and constant prices for the following activities: public administration and defense, education, human health and social work activities is the same as for professional, scientific, technical, administrative and support service activities (section 4.1.8). In addition to above mentioned estimation prcedures, GFS



data from the Ministry of Finance - Revenues and expenses for consolidated general government (source 28) are also used in order to estimate the trend for those activites.

4.1.10.OTHER SERVICE ACTIVITIES (R, S, T, U)

Value added compilation at current and constant prices for the group of other service activities (which are presented together) is the same as for professional, scientific, technical, administrative and support service activities (section 4.1.8).

4.2. FISIM

CBS calculates FISIM on annual basis according to the Council Regulation 448/98 and the Commission Regulation 1889/2002.

The information and data sources which are used to calculate and distribute FISIM to different economic activities at annual level are not available on the quarterly basis. Due to the lack of quarterly sources, CBS do not estimates quarterly FISIM separately.

CBS uses extrapolation method based on annual current prices where the annual series already have included FISIM.

4.3. TAXES LESS SUBSIDIES ON PRODUCTS

CBS calculated quarterly gross domestic product at market prices by adding taxes on products and subtracting and subsidies on products on gross value added at basic prices.

The calculations for quarterly taxes and subsidies are based mainly on the records from the Ministry of Finance - Revenues and expenses for consolidated general government (source 28) and data are available and compiled for VAT (D.211), customs (D.212), excise duties (D.214) and for subsidies on products (D.31).

Period reallocations and simply time-adjusted method is usually made in order to obtain the accrued value, since Ministry of Finance records are cash-based.



5. GDP COMPONENTS: THE EXPENDITURE APPROACH

5.1. HOUSEHOLD FINAL CONSUMPTION

Household expenditure for final consumption represents the value of goods and services that are purchased by resident households during a calendar year, regardless of whether they are spent in that year. The value of total spending on final consumption of households includes the consumption of resident households on both the domestic market and abroad.

Household Final Consumption Expenditure (HFCE) has been calculated as the sum of final consumption on the domestic market and direct purchases by residents abroad, minus purchases of non-residents. The main source for the calculation of expenditure on goods and services are: turnover data for retail trade (source 29) and for hotels and restaurants (source 13), regular CBS monthly and quarterly branch statistics survey data (source 30, 31), the Croatian National Bank data (source 42) and other administrative data sources (source 28).

The main source for calculation on goods at current prices is retail trade turnover data according to the trade activities (source 29; 37 groups). It is estimated that around 12 per cent of the purchases by households do not constitute final consumption. Instead, they constitute either intermediate consumption or gross fixed capital formation of small entrepreneurs and unincorporated enterprises.

The main source for calculating expenditure on goods is quarterly retail trade turnover data. Other data sources are: the consumption of own production is calculated on the basis of the volume indices and implicit deflators from the production approach. Constant prices are calculated at very detail level using different CPI-sub indices.

Imputed rent of owner occupiers is calculated on the basis of the volume indices and implicit deflators from the production approach. Electricity consumption is estimated on the basis of the data on electricity consumed by households (administrative data sources, primarily HEP - Croatian Electricity Company; source 32).

Expenditures on hotels and restaurants are estimated on the basis of the data on turnover according types of services (catering services) and type of accommodation facilities (number of tourists and tourist nights; source 13, 14, 30,31). The turnover on hotels and restaurants is increased by the turnover rates of rooms rented out in private property of citizens. Constant prices are calculated using CPI-sub indices (source 22). The structure of consumption is used as weights.



Data on turnover in hotels and restaurants and corresponding indices are based on the Quarterly Report on Trade and Other Services (USL-1 form). According to the Regulation on Short-term statistics, accommodation and food service activities (NACE 55 and NACE 56) are part of the list of service sector activities which are included in Quarterly Report on Trade and Other Services (USL-1 form). The main purpose of the survey is the measuring of turnover changes in service activities. The USL-1 survey is conducted by using the sample method. Sample results are grossed up to estimates for the whole population. The sample covers all large and medium-sized (employing 50 or more persons), while micro-sized and small business entities are selected by using a random stratified sample method.

For transport services indices based on the number of passenger kilometres by type of transport (source 15) are used as volume indices as well as different CPI sub-indices.

For all other services (education, health, culture and recreation, other services), due to the lack of data on output for certain personal services, the quarterly index of employment is used as extrapolator instead (source 20). Constant prices are calculated using CPI-sub indices.

The consumption of residents abroad and consumption of non-residents in the Republic of Croatia is based on data from the Balance of Payments, which has been regularly compiled and published by the Croatian National Bank (source 42). The resident consumption abroad is deflated by different foreign countries CPI indices, using the structure of consumption by countries as weights. The exchange rate conversion has been taken into account. The non-resident consumption in the Republic of Croatia is deflated by different domestic CPI sub-indices, using the structure of consumption as weights. The TOMAS survey structure of consumption has been used as weights.

The Tomas survey is the only longitudinal survey on various characteristics of tourists in Croatia, conducted for the eighth times by the Institute for Tourism since 1987. The survey takes place during the three summer months (June to September) at the all coast counties (85 destinations). By personal questionaire-interiew method a sample of tourists from all over the world (15 country destinations) are asked on attitudes and expenditures of tourists in Croatia.

Final consumption expenditure of households at current prices as the largest GDP expenditure approach category is deflated by relevant sub-indices of the consumer price index. The overall implicit deflator for household final consumption expenditure does not deviate significantly from the overall consumer price index.



5.2. GOVERNMENT FINAL CONSUMPTION

Government final consumption expenditure is calculated according to the cost method. Main data sources are annual government final consumption expenditure (source 34) and quarterly government finance statistics data (provided by Ministry of finance every quarter source 33). Final consumption expenditure equals output minus (-) sales plus (+) social benefits in kind related to expenditure on products supplied to households via market producers. Output is derived as a sum of compensation of employees, consumption of fixed capital, other taxes on production and intermediate consumption.

Compensation of employees in current prices is obtained by appropriate indices of compensation of employees provided by the Ministry of Finance (compensation of employees' data of general government; the index based to the average of the previous year; source 33).). Estimates in constant prices are obtained by extrapolation, using an input indicator based on employment and classified by NACE activities which are characteristic for S.13 (three-digit NACE 2007 source 23 and 34). Annual shares of this category in individual and collective estimates (based on COFOG classification) are applied to get the split-up in individual and collective estimates for each quarter.

Consumption of fixed capital and other taxes less subsidies on production in current prices are obtained in previous year's prices by inflating constant price estimate with appropriate industrial producer price index/IPPI (source 9) and consumer price index/CPI (source 22). Both consumption of fixed capital and other taxes less subsidies on production in previous year's prices are approximations only, due to lack of quarterly data sources. Fixed shares of these categories in compensation of employees and intermediate consumption at annual level (in previous year's prices; shares are separate for collective and for individual consumption) are applied to get quarterly estimation of these categories in previous year's prices. Annual data on consumption of fixed capital are calculated using the PIM method (further information can be found in the Croatian GNI Inventory and its Annex).

Intermediate consumption in current prices is derived by preparing weighted data, which are constructed by extrapolation of previous year's estimates with input indicators based on employment and quarterly government finance statistics data (source 23, 33 and 34). Intermediate consumption in constant prices is derived by deflating the current price estimates by a deflator constructed from its component series. This deflator of intermediate consumption is based on a weighted index covering expenditure on materials, raw materials, energy, various services and other expenditure (elements from book keeping report), which means the same stratification which is applied at annual level is used at quarterly level as well (source 9, 22 and 34) Annual shares for this category in individual and collective estimates



(based on COFOG) are applied to get the split-up into individual and collective estimates for each quarter (source 34).

During the IPA 2009 project on constant prices, the calculation of intermediate consumption at quartery level was improved in both its stratification level as well as choice of corresponding consumer and industrial producer price indices (for more information refer to "IPA 2009 Description on sources and methods PART B – Price and volume measures").

Quarterly sales is obtained by applying the same share of this category in gross output both in current and previous year's prices as used at annual level, due to lack of information when it comes to quarters. The annual shares of this category in individual and collective estimates (based on COFOG classification) are applied to get the split-up in individual and collective estimates for each quarter (source 34). The Ministry of Finance provides quarterly GFS data on sales of goods and services category as cumulative data (source 33). These data have been analysed for quarterly purposes but are not used in the present calculations because they are cash based data. For this reason, a trend-indicator approach is used as the second best solution.

Social benefits in kind (D.631) in current prices are approximate estimates due to lack of quarterly data sources. The same share of this category in gross output of individual consumption at annual level is assumed to obtain estimates for each quarter (source 34). Constant prices are derived by deflating the current price estimates by corresponding consumer price index/CPI (source 22). The Croatian Health Insurance Fund (HZZO) provides approximately 90% of the component quarterly data (on cumulative bases on this category every quarter (source 36). Four years of quarterly data (starting with Q1 2010) have been analysed. The main conclusion is that they are cash based data and their quarterly quality is too volatile. Hence, these data are not used in the present calculations and the above trend-indicator approach is used as the second best solution.

There is quarterly survey on budgetary units (source 35). Data are processed by Fina (which is institution authorized for data processing) and delivered to CBS on a cumulative bases (I-III, I-VI and I-IX). Special effort and attention has been paid to quality of these data, and the results for the main GFCE categories have been analysed for a longer period of time. They are not used in present QNA calculations due to lack of accuracy, lack of units' coverage and the fourth quarter absence.



5.3. NPISH FINAL CONSUMPTION

Final consumption expenditure of non-profit institutions serving households (NPISH) is equal to the value of goods and services produced by NPISH and provided to households free of charge both in current and previous year's prices. Expenditure components are calculated according to the cost method. Final consumption expenditure equals output minus (-) sales. Output is derived as a sum of compensation of employees, consumption of fixed capital, other taxes on production and intermediate consumption. Sales are estimation due to lack of quarterly data sources.

Compensation of employees in current prices is obtained by appropriate quarterly constructed weighted indices based on average monthly gross earnings. Average monthly gross earnings (source 21 and 37), as well as their nominal indices are classified by NACE 2007 activities which are characteristic for S.15. Weights used for calculating the index reflect importance of compensation of employees of appropriate NACE 2007 activities in total annual compensation of employees of NPISH sector (source 37). Estimations in previous year's prices are obtained by extrapolation, using an input indicator based on employment and classified by NACE 2007 activities which make part of NPISH sector by default (source 23 and 37).

Consumption of fixed capital and other taxes less subsidies on production in current prices are obtained from estimates in previous year's prices by inflating constant price estimates with appropriate industrial producer price index/IPPI (source 9) and consumer price index/CPI (source 22). Both consumption of fixed capital and other taxes less subsidies on production in previous year's prices are approximate estimates due to lack of quarterly data sources. Fixed shares of these categories in compensation of employees and intermediate consumption at annual level are applied to get quarterly estimates in previous year's prices. Annual data on consumption of fixed capital are calculated using the PIM method (further information can be found in the Croatian GNI Inventory and its Annex).

Intermediate consumption in current prices is obtained from estimates in previous year's prices by applying a deflator constructed from its component series. This deflator is based on weighted index covering expenditure on materials, energy, office material, various services and other expenditure, which means the same stratification which is applied at annual level (source 9, 22 and 37). Estimations in previous year's prices are obtained by extrapolation, using an input indicator based on employment and classified by NACE 2007 activities which are part of NPISH sector (source 23 and 37).

During IPA 2009 project on constant prices calculation of intermediate consumption at quarterly level was improved in both its stratification level as well as choice of corresponding



consumer and industrial producer price indices (for more information refer to "IPA 2009 Description of sources and mathods, PART B – Price and volume measures").

Sales, both in current and previous year's prices, are assumed to have the same share of this category in gross output in current or previous year's prices as at annual level (source 37) due to lack of quarterly information.

There is a quarterly survey on non-profit institutions (source 38). Data are processed by Fina (which is institution authorized for data processing) and delivered to CBS on cumulative bases (I-III, I-VI and I-IX). These data have been converted to main categories of NPISHs final consumption expenditure and thoroughly analysed for a longer period of time. They are not used in present QNA calculations due to lack of accuracy, lack of units' coverage and the fourth quarter absence.

5.4. GROSS CAPITAL FORMATION

In practice, three methods are used to calculate the quarterly GFCF: quarterly surveys on gross fixed capital formation, the commodity flow method and the extrapolation of the annual data by quarterly volume indices. The CBS has used all three methods to estimate the GFCF.

The quarterly survey has been introduced by the Financial Agency (FINA) at the beginning of 1999. The statistical surveys cover large, medium and small enterprises, banks and savingbanks, insurance companies, non-profit institutions and government institutions. The data on revenues, costs, gross fixed capital formation, changes in inventories and number of employed persons is required every quarter, and also for the same period of the previous year (I-III, I-VI; and I-IX). The data are obtained from the profit and loss statements of the reporting units.

The quarterly questionnaire provides data on investments in fixed assets, identifying separately tangible and non-tangible assets. The tangible assets are divided into dwellings, other buildings and structures, machinery and equipment (including installation) and other tangible assets. Machinery and equipment are subdivided into domestic and imported. The definitions used in the surveys are consistent with those used in the annual survey.

The statistical surveys for non-financial institutions, banks and saving-banks, insurance companies were canceled in the beginng of 2013 due to expensise costs. Also during the years the quality of data becomes less accurate. At the moment there are only the statistical surveys covering government institutions and non-profit institutions left.



Quarterly estimates for gross fixed capital formation (GFCF) at constant prices are derived by using appropriate price indices and the investment structure (by asset) from the last annual calculation. Construction is deflated by the implicit price deflator for the construction activity obtained from the production approach (source 11, 21, 22). Domestic equipment is deflated by the producer price indices for capital goods (source 9). Imported equipment is deflated by relevant components of the UVI for imports (source 41). Other GFCF was deflated by the CPI (source 22).

During the IPA 2009 project on constant prices, the calculation of imported equipment has been improved. The improvements achieved are briefly described below.

Imported equipment is deflated by the foreign countries export price indices (corresponding producer price non-domestic indices) starting from the first quarter of 2011 (source 51).

The methodology consists of the calculation of weighted indices using foreign countries industrial producer price indices on non-domestic market by NACE, exchange rate and structure of Croatian imports of selected NACE groups of products (for more information refer to "IPA 2009 Description of sources and methods, PART B – Price and volume measures").

Other GFCF is deflated by the same indices as at the annual level except for the use of the US hedonic price index.

Changes in inventories

Changes in inventories equal the value of the entries into inventories minus the value of withdrawals and the value of any recurrent losses of goods held in inventories. The inventories consist of the following four categories: materials and supplies, work in progress, finished goods and goods for resale.

The quarterly surveys of enterprises collected the necessary information on these four categories. Changes in inventories have been calculated as the difference between the levels of the inventories at the beginning and the end of the quarter revaluated at the average price of the quarter using appropriate deflators.

Changes in inventories were calculated by using data from the Quarterly Statistical Report on Business Results of Entrepreneurs until the fourth quarter of 2012. In the 2013 quarters, the changes in inventories were calculated by using the data of the Quarterly Statistical Report (source 45, 46, 47, 48) and Croatian Bureau of Statistics data on changes in inventories (source 50, 29). The statistical discrepancy was also included in this category (the difference in the GDP calculation by production and expenditure approach).



The components of the quarterly estimates of changes in inventories at current prices are deflated separately in the following way: Finished goods and work in progress are deflated by the producer price index (source 9). Materials and raw materials are deflated by the producer price index for intermediate goods (source 9) (except energy) and the import price indices (source 41). Goods for resale are deflated with the CPI-indices (source 22).

5.5. IMPORTS, EXPORTS

The Balance of Payments of the Republic of Croatia is regularly compiled quarterly and published by the Croatian National Bank. This is the main data source for the quarterly estimates of exports and imports of goods and services (source 42).

The balance of payments of the Republic of Croatia represents a systematic overview of the value of economic transactions performed by the Croatian residents with foreign countries within a particular period. It is compiled in accordance with the recommendations of the International Monetary Fund (Balance of Payments Manual). Data sources include: 1) reports of the government institutions (Central Bureau of Statistics and Croatian Institute for Health Insurance), 2) special reports of the Croatian National Bank (International Transaction Reporting System (ITRS), external debt relations, monetary statistics and reserve assets) and 3) estimates and statistical research carried out by the Croatian National Bank.

Exports and imports of goods

The Report of the Central Bureau of Statistics on foreign trade in goods of the Republic of Croatia represents the basic data source for the balance of payments items related to exports and imports of goods (source 40). These data are adjusted, in accordance with the recommended compilation method, for coverage and classification.

Accordingly, goods exports and imports in the balance of payments are reported at f.o.b. parity. In addition, since 1999, based on the Survey on Consumption of Foreign Travellers in Croatia and Domestic Travellers Abroad, the item "of goods exports" has been modified by the estimated value of goods sold to foreign travellers and tourists and taken out of the Republic of Croatia. The item "of goods imports" is adjusted for the estimated value of goods imported personally by the Croatian citizens from the neighbouring countries (shopping expenditures).

Exports and imports of services

Transportation, travel and other services are reported separately under service account.



Revenues and expenditures on the basis of transportation, are calculated as follows. Revenues and expenditures arising from transportation of goods and passengers, as well as the value of accompanying services, which together constitute the total value of these services, are compiled on the basis of the results of the Research on transactions related to international transportation services, carried out by the CNB.

As of January 2011, due to the abolishment of the ITRS, this item has been compiled on the basis of data from export customs declarations of the CBS and estimates of the Road Freight Transporters Association. Expenditures on the basis of road freight transportation equal transportation and insurance costs related to imports of goods which belong to non-residents and which are estimated by adjusting the value of imports at c.i.f. parity to the value of imports f.o.b.

Travel services

Revenues from services rendered to foreign travellers and tourists, as well as expenditures incurred by domestic travellers and tourists abroad are shown under the position "Travel". In the 1993-1998 period, this position was assessed by using various data sources which did not provide for a full coverage in accordance with the recommended methodology. Accordingly, in the second half of 1998, the Croatian National Bank started to carry out the Survey on Consumption of Foreign Travellers in Croatia and Domestic Travellers Abroad and use its results for compiling the Travel position. Since early 1999, the results of this Survey, based on carrying out a survey of travellers (stratified sample) at border crossings, have been combined with the Ministry of the Interior and Central Bureau of Statistics data on the number of foreign and domestic travellers, along with the data on distribution of foreign travellers by countries contained in the CBS Report on tourism, in order to assess the corresponding balance of payment items.

Starting from the first quarter of 2012, the balance of payments data on revenues from services rendered to foreign travellers and tourists are not computed using the standard methodological combination of volume indicators and estimated average consumption from the Survey on Consumption of Foreign Travellers, but are based on a combination of the estimated level of tourism consumption in 2011 and an econometrically computed indicator – the first principal component of a group of variables that are assumed to follow the dynamics of tourism revenue (foreign tourist arrivals and nights, the number of foreign travellers at border crossings, total tourist consumption according to the CNB survey, the number of the employed in accommodation and food service activities, the revenues of hotels and restaurants, the price index of hotel and restaurants services, the real retail trade turnover index, currency outside banks, the value of foreign credit card transactions, the banks'



turnover in transactions with natural persons in the foreign exchange market and the industrial production EU-27).

The "Other services" position is compiled by using different data sources: apart from revenues and expenditures related to insurance services and communication and construction services, which have been determined by the CNB special statistical research since 2001, the values of all other services were adopted from the ITRS until the end of 2010, when the reporting by transaction types was abolished. As of 2011, the uniform statistical survey is used for estimating the position of Other services, which encompasses 30 different types of services, the classification of which is prescribed by the IMF's Balance of Payments Manual, 6th edition. That survey also includes communication services, as a result of which a special survey on communication services was abolished, while insurance and construction services continued to be monitored through separate surveys.

Permanent analysing data of exports of tourist services

The share of tourist services in GDP in the Republic of Croatia amounts to 14-15 percent, at the annual level, and quarterly (third quarter) the share is much higher. The share of export of tourist services in quarterly GDP in the third quarter 2013 was 33%. The share of travel services in the structure of the total export of services amounts to more than 70 percent. The contribution of tourism to the realised GDP growth rate is extremely significant in Croatia. Becouse of huge share in Croatian QGDP special attention is given to analysing export tourist results during the years.

CNB has changed methodology in the past a few times. In 2012 CNB introduced the new approach described above. CNB has changed the preliminary calculated results for 2012 quarters. The big revisions in the data for Q1 and Q2 2012 were due to the use of the econometric model for initial estimates and their subsequent revision in the light of the survey results. Preliminary results of export of tourist services by the new methodology are not taken into account for quarterly GDP calculation during the 2012 quarters becouse of their huge volatility. Revised CNB quarterly figure for 2012 quarters now are much lower then preliminary results.

Time series of level data need to be consistent in time; meaning that data should refer to the same units, measured in similar ways over time using fixed classifications and measurement methodologies. Breaks can occur in time series; if so they should be explicitly flagged and explained. The break in the time series can be removed by revising the values in the time series before the break by compiling data for the units all the way back to the period when they came into existence (if after the beginning of the time series), or by applying the new



classifications and measurement methodologies to all periods included in the time series. Such a revision implies that the whole time series will change, also for the periods before the break.

During the IPA 2011 project the relations between Exports of tourist services and the category-net errors and omissions in BOP summary table have been analysed. The item "net errors and omissions" comprises the counter entry of a part of revenues from travel services which relates to such revenues not stated in the banks' records. For the third quarters these entries can be substantial (for many years exceeding 10%) indicating that tourism services are in fact systematically higher than reported in Q3.

Constant prices

In order to deflate exports and imports of goods, the detailed division of total exports and imports in accordance with the Standard International Trade Classifications (SITC) was used. The value in current prices by certain items was deflated by Fisher's unit value indices (source 41).

During IPA 2009 project on constant prices, calculation of exports and imports of goods and services as well as exports and imports of other services have been significantly improved. The improvements achieved are briefly described below.

Exports of goods are deflated by the corresponding producer price indices on non-domestic market (source 44) started from the first quarter of 2011.

CBS started to produce industrial producer price indices on non-domestic market on a monthly bases and published results for the first time from the January of 2011. Starting with the first quarter of 2011 exports of goods are deflated by the corresponding industrial producer price indices on non-domestic market by NACE. Only a few items are deflated by the corresponding UVI.

Imports of goods are deflated by the foreign countries industrial producer price indices on nondomestic market (source 51) started from the first quarter of 2011.

For the calculation of weighted indices foreign countries industrial producer price indices on non-domestic market by NACE are used, as well as exchange rates and the structure of Croatian imports by NACE. Starting with the first quarter of 2011 imports of goods is deflated by the corresponding industrial producer price indices on non-domestic market by NACE.

One of the biggest improvements developed under IPA 2009 project, according to expert assessment is the construction of imports deflators using foreign countries industrial producer price indices on non-domestic market by NACE, using the structure of Croatian imports of



goods and exchange rates (for more information refer to "IPA 2009 Description of sources and method, PART B – Price and volume measures").

Deflation of exports of tourist services is based on the use of appropriate price indices of the CPI using the structure of tourist consumption as weights. Deflation of imports of tourist services is based on the use of the CPI of the destination countries of residents, as well as exchange rates and using the structure of tourist consumption as weights.

Exports of transport services were deflated by the relevant CPI indices. Imports of transport services were deflated using the total unit value index for imports (before 2011) and implicit deflator for goods (after 2011).

Exports of other services are deflated using relevant consumer price indices-services. Imports of other services are deflated using HICP-EU, taking into account exchange rates.



6. GDP COMPONENTS: THE INCOME APPROACH

The income approach provides estimates of GDP and its income component parts at current market prices. Since the GDP in accordance with the income approach is calculated simultaneously with the production approach, the reference framework is the same as for the production approach. Calculation of QGDP by production approach is considered to be more reliable due to the existence of exhaustive data sources and a very detailed level of calculation and provides benchmarked values for the calculation of QGDP by the income approach.

CBS still does not publish data on QGDP by income approach at national level. Data are transmitted to Eurostat on regular basis at T+70 days in transmission table 103.

6.1. COMPENSATION OF EMPLOYEES

Compensations of employees (D.1) on quarterly basis are calculated only as total value and a breakdown to different industries/activities is no available at the moment. The main quarterly indicator used in the process of estimation of compensation of employees is the average monthly gross earnings (source 21). This indicator is considered to be suitable for estimation which is carried out by applying nominal indices of average monthly gross earning to the values of compensation of employees for the same quarter of the previous year.

6.2. TAXES LESS SUBSIDIES ON PRODUCTION

Taxes less subsidies on production and imports (D.2-D.3) are defined as the sum of taxes less subsidies on products (D.21-D.31), which have been described in section 5.3, and other taxes less subsidies on production (D.29-D.39).

Currently, the tax system of the Republic of Croatia does not include other subsidies on production (D.39) and they have not been calculated in the Croatian national accounts. Therefore, the category other taxes less subsidies on production (D.29-D39) consists of taxes on production (D.29) only. Because of the lack of appropriate quarterly data sources for the estimation of other taxes on production (D.29), nominal indices of taxes on product (D.21) are applied in order to estimate the movement of required category for the respective quarter.



6.3. GROSS OPERATING SURPLUS & MIXED INCOME

Since there is no reliable information on quarterly Gross operating surplus and Gross mixed income, the sum of those two categories is derived as the residual between GDP as determined by production approach and the sum of compensation of employees (D.1) and taxes less subsidies on production (D.2-D.3).

7. POPULATION AND EMPLOYMENT

7.1. POPULATION

Figures on population are obtained from demographic statistics. Data for the Total population for the period 2001Q1-2013Q3 have been presented according to the revised population estimates of the Republic of Croatia on the basis of the 2011 Census as the annual averages of the total population.

7.2. EMPLOYMENT: PERSONS

Central Bureau of Statistics conducts regular annual and monthly surveys on the number of employees, which are also used in National Accounts as the main source of data for employment calculations (source 20). These surveys cover legal entities of all types of ownership, government bodies, and bodies of local and regional self-government units on the territory of the Republic of Croatia. Data are collected through the report filled in by legal entities on the basis of the records of persons in employment.

Data on persons in employment in crafts and trades and free-lances are processed based on the records on pension insurance beneficiaries obtained from the Croatian Institute for Pension Insurance (source 23). The Croatian Institute for Pension Insurance also provides data on employed insured persons – private farmers (source 23).

The survey on persons in paid employment in legal entities includes all persons who have signed a work contract, regardless of the type of work contract and whether they work full time or less than full time. The survey on persons in crafts and trades and free lances includes owners and employees registered with the Croatian Institute for Pension Insurance.



Quarterly unemployment figures are obtained from the Croatian Employment Service and from the Labour Force Survey which measures the economic activity of the population in a short survey period of one week. These data differ due to methodological characteristics. Data on registered unemployment are obtained from the Register of Unemployed Persons kept by the Croatian Employment Service, while the Labour Force Survey results are collected through interviewing private households. The Register contains data on all unemployed persons in Croatia, while the Labour Force Survey results are estimated on the basis of a representative statistical sample. The reference week for the Survey, which has been carried out in the Republic of Croatia since the beginning of 2007, is every week throughout the year. The quarterly unemployment figures are important for the estimate of exhaustiveness that is also included in the employment calculation within National Accounts.

As well, the data source for table 0111 (Employment by industry) could be the annual and monthly surveys which are conducted by the Labour Market Statistics Department but some adjustments will have to be made because the data coverage for the purposes of employment calculation in National Accounts is insufficient.

Therefore, some further improvements, related to the following categories of employees and self-employed, should be made:

- Non-resident employees working for a resident employer (cross-border workers);
- Non-resident seasonal workers;
- Students who work;
- Staff of Croatian embassies and consulates abroad;
- Employees working on Croatian ships;
- Persons living in institutional or collective households (religious institutions, prisons, etc.);
- Persons below 15 years old and above 65 years old;
- Farmers and unpaid family workers in agriculture;
- Members of the armed forces or military staff at international organizations abroad;
- Exhaustiveness adjustments and other.

Data are available by individual country and by kind of permit (seasonal workers who stay in Croatia for less than one year, cross-border workers, and students), but estimates of illegal workers are not included. The Croatian Ministry of Foreign and European affairs provides information about the number of non-residents employed by Croatian embassies. Cross-border work is widespread, but it is often illegal and without clear identification, because most people who live in border places has dual citizenship. Data about the number of registered workers who do not require work permits could also be provided. One can identify



three large groups of non-residents. First, workers from neighboring countries such as Bosnia and Herzegovina, Serbia and Kosovo working in the construction industry. These workers are low paid.

The second important group consists of seasonal workers in the service industries, such as tourism. These are also lower paid workers. Workers from Bosnia and Herzegovina, Serbia and Kosovo, Slovenia and Italy work in tourism companies. The third important group consists of non-resident workers in Croatian privatized companies. These are higher paid workers, mostly from Germany, USA, Austria, Italy, Great Britain and other developed countries.

The calculation of the number of residents working abroad is based on the quarterly data of the survey conducted by CNB that identifies workers by country of employment. Illegal work is not included. Croatian nationals are not employed as members of the armed forces or military staff at international organizations abroad. There are no foreign military bases in Croatia, which could employ Croatian residents.

Other data sources for identifying the number of Croatian residents abroad have also be identified, such as the Labour force survey, data from Croatian Bureau of Employment, data from Ministry of Internal Affairs and data from Croatian Chamber of Commerce. The most important conclusion from a comparative analysis is that most of Croatian residents working abroad are crew and sailors on foreign ships mostly from the United States, Great Britain, Cyprus, and Norway and also on many non-European ships.

Number of employees

Quarterly figures on number of employees include number of persons in paid employment in legal entities and persons in employment in crafts. These figures are based on the regular annual and monthly surveys and other administrative sources which are taken from Labour Market Statistics Department.

Number of self-employed

Quarterly figures on number of self-employed include insured private farmers, owners of crafts, freelancers and estimation of the exhaustiveness. Data on insured private farmers, owners of crafts and trades and freelancers are based on annual and monthly surveys on persons in employment and other administrative sources which are taken from Labour Market Statistics Department. And estimation of exhaustiveness is a result of the quarterly unemployment figures obtained from the Labour Force Survey and Croatian Employment Service.



7.3. EMPLOYMENT: TOTAL HOURS WORKED

For the time being, data on total hours worked have not yet been used in employment calculations within National Accounts. However, data on *Hours actually worked* are available in the regular annual and monthly surveys on the number of employees, but only for the number of persons in paid employment in legal entities so it would be necessary to make some adjustments. Hours actually worked include effective hours of work, hours of waiting, stoppage or interruption at work which employees are not responsible for (also available according to NACE Rev.2 since 2009).

8. GDP TO NET LENDING/BORROWING

8.1 PRIMARY INCOME FROM/TO THE ROW (D.1 TO D.4), GROSS NATIONAL INCOME

For several years CBS is sending transmition table 107 to the Eurostat with quarterly figures. Table 107 consists of 17 columns;

- (B1G) Gross domestic product in current prices;
- (D1_4) Primary income receivable from the rest of the world;
- (D1_4) Primary income payable to the rest of the world;
- (B5G) Gross national income at market prices;
- (K1) Consumption of fixed capital;
- (B5NQ) Net national income at market prices;
- (D7) Current transfers receivable from the rest of the world;
- (D7) Current transfers payable to the rest of the world;
- (B6N) Net national disposable income;
- (P3) Final consumption expenditure;



(D8) Adjustment for the change equity of households in pension fund reserves;

(B8N) Saving net;

- (D9) Capital transfers receivable from the rest of the world;
- (D9) Capital transfers payable to the rest of the world;
- (P5) Gross capital formation;
- (K2) Acquisitions less disposals of non-finnancial non-produced assets and
- (B9) Net lending/net borrowing.

Gross domestic product (GDP) is the value of the overall output of goods and services at market prices within given period of time, excluding net income from abroad.

Primary income receivable from the rest of the world is the income which resident units receive as a result of their direct participation in the production process abroad. Primary income receivable from the rest of the world includes Compensation of employees, Taxes (less subsidies) and Property income receivable from the rest of the world.

Property Income includes interest, distributed income from corporations comprising dividends and withdrawals from income of corporations, reinvested earnings of FDI, rent on land and property income attributed to insurance policy holders receivable from the rest of the world.

Primary income payable to the rest of the world is the income which non-resident units receive as a result of their direct participation in production process in the reporting country.

Primary income payable to the rest of the world includes Compensation of employees, Taxes (less subsidies) and Property income payable to the rest of the world.

Property Income includes interest, distributed income from corporations comprising dividends and withdrawals from income of corporations, reinvested earnings of FDI, rent on land and property income attributed to insurance policy holders payable to the rest of the world.

Gross national income at current prices is the resulting item where GDP at current prices is the opening entry. Primary income receivable from the rest of the world minus primary income payable to the rest of the world is then added. Gross national income equals the sum



of Gross domestic product and the balance of primary incomes with the rest of the world (source 42).

Data sources include: 1. Reports of the Government Institutions (Croatian Bureau of statistics, Croatian Institute for Health Insurance, Croatian Bureau of Employment, Ministry of Internal Affairs and Croatian Chamber of Commerce), 2. The Croatian National Bank Special reports (International Transaction Reporting System, external debt relation, monetary statistics and reserve assets), and 3. Estimates and statistical research carried out by the CNB.

8.2 CONSUMPTION OF FIXED CAPITAL (K.1), NET NATIONAL INCOME, ACQ. LESS DISP. OF NON-FINANCIAL NON PRODUCED ASSETS (K.2)

Consumption of fixed capital is the loss of value of fixed capital assets such as machines, tools etc., due to normal wear and tear in use and due to expected obsolescence. It is also known as depreciation. Obsolescence means loss of fixed capital due to change in technique of production or due to change in demand for goods that it produces.

Net national income is compiled as Gross national income minus Consumption of fixed capital.

In the process of production of goods and services, there will be some depreciation of fixed capital as well. If the value of consumption of fixed capital is deducted from the value of gross national income one obtains the value of Net national income.

Calculation of Consumption of fixed capital is done by GDP production approach department.

Acquisitions less disposal of non-produced non-financial assets are transactions in nonfinancial non-produced assets which consist of land and other tangible non-produced assets that may be used in the production of goods and services, and intangible non-produced assets. At the moment CBS does not produce an estimate of this aggregate.



8.3 CURRENT TRANSFERS FROM/TO THE ROW (D.5 TO D.7), NET NATIONAL DISPOSABLE INCOME (B.6N)

Current tranfers from the rest of the world comprise transfers of income between residents of the reporting country and the rest of the world that carry no provisions for repayment (source 42).

Net current transfers from abroad is equal to the unrequited transfers of income from non-residents to residents minus the unrequited transfers from residents to non-residents.

Net national disposable income measures the income available to the nation for final consumption and net saving. It equals net national income (at market prices) minus current transfers in cash (taxes on income and wealth, etc., social contributions, social benefits other than social transfers in kind, and other current transfers) payable to non-resident units, plus transfers receivable by resident units from the rest of the world.

Data source for calculating Current transfers from/to the Rest of the world is the Balance of payments which is published quarterly by the Croatian national bank (CNB) in the Current transfer part of Income account.

In other words, national disposable income may be derived from national income by adding all current transfers in cash receivable by resident institutional units from non-resident units and subtracting all current transfers in cash payable by resident institutional units to non-resident units.

Final consumption expenditure consists of the aggregates of individual consumption expenditures and collective government consumption expenditures.

8.4 ADJUSTMENT FOR THE CHANGE IN NET EQUITY (D.8), NET SAVING (B.8)

The adjustment for the change in the net equity of households in pension fund reserves is equal to the total value of the actual social contributions payable into private funded pension schemes plus the total value of contribution supplements payable out of the property income attributed to insurance policy holders (i.e., holders of pension rights) minus the value of the associated service charges minus the total value of the pensions paid out as social insurance benefits by private funded pension schemes; this adjustment is designed to ensure that the



balance of pension contributions over pension receipts (i.e., of "transfers" payable over "transfers" receivable) does not enter into household saving (source 52).

Data source for the Adjustment for the change in net equity of households in pension fund reserves is REGOS (Central Registry of Affiliates). This institution provides technical support for the second pillar of pension insurance.

Net saving is net disposable income minus final consumption expenditure.

8.5 CAPITAL TRANSFERS (D.9), NET LENDING/BORROWING (B.9)

Capital transfers are transactions, either in cash or in kind, in which the ownership of an asset (other than cash and inventories) is transferred from one institutional unit to another, or in which cash is transferred to enable the recipient to acquire another asset, or in which the funds realised by the disposal of another asset are transferred.

Examples are capital taxes, investments grants, certain government transfers to victims of wars and catastrophes, legacies to NPIsH. All trancastions must be between residents and non residents or between countries.

Gross capital formation is composed of gross fixed capital formation and changes in stocks (statistical discrepancy included). Gross fixed capital formation consists of investments into new fixed capital formation, costs of transactions of existing fixed assets and of additions to the value of non-produced assets.

Net lending/net borrowing is the net amount a unit or a sector has available to finance, directly or indirectly, other units or other sectors. It is the balancing item in the capital account and is defined as: Net saving plus capital transfers receivable minus capital transfers payable minus the value of acquisitions less disposals of non-financial assets plus consumption of fixed capital.

Net lending / net borrowing with the rest of the world equals the balance of current external transactions plus the balance of capital transfers with the rest of the world minus net acquisitions less disposable of non-produced non-financial assets with the rest of the world.



Resulting items and final remarks

The central and most important part of table 0107 is the calculation of Gross national income at current prices. The most important source for the calculation of GNI is the Balance of payments which is published quarterly by the Croatian National Bank in the Income part. CBS calculates net primary income from/to the rest of the world. This is the sum of compensation of employees, direct investment income, portfolio investment income and other investment income receivable from the rest of the world minus sum of compensation of employees, direct investment income, portfolio investment income and other investment payable to the rest of the world. This is first resulting item in the table 107.

The second resulting item is Net national income at market prices. This is calculated by subtracting Consumption of fixed capital from Gross national income.

The third resulting item is Net national disposable income. This is calculated by adding Current transfers receivable from the rest of the world to the Net national income at current prices and then subtracting Current transfers payable to the rest of the world.

The fourth resulting item in the table 0107 is net Saving. This is calculated by subtracting Final consumption expenditure from Net national disposable income.

The fifth and final resulting item in the table 0107 is Net lending/net borrowing. It is calculated as Saving net plus Capital transfers receivable from the rest of the world minus Capital transfers payable to the rest of the world minus Gross capital formation minus Acquisition less disposal of non-produced non-financial assets plus Consumption of fixed capital.

For several years we are sending table 0107 annualy and quarterly to the Eurostat with last resulting item Net national disposable income. Now we can calculate and fulfill the complete table 107 with annual numbers. Additional work is necessary for calculating part of table 107 with quarterly figures in (D8) Adjustment for the change equity of households in pension fund reserves and (D9) Capital transfers receivable/payable from/to the rest of the world; We will calculate that in the near future.



9. FLASH ESTIMATES

9.1. FLASH GDP ESTIMATE

The Central Bureau of Statistics publishes the flash estimate of the quarterly gross domestic product since the second quarter of 2009. This estimate is published 60 days after the end of the quarter. It is a result of the effort of the Central Bureau of Statistics to shorten the period between the collection and publication of statistical data by further harmonisation with EU publishing standards as stipulated by one of the main principles of official statistics, namely the timeliness.

The Central Bureau of Statistics publishes the flash estimate of the quarterly gross domestic product volume index (comparison of quarter to the same quarter of previous year), the largest contribution to the GDP volume changes and the largest contribution to the decreased, since second quarter of 2013.

The GDP flash estimate is one of the most important macroeconomics indicators. By making the flash estimate of the quarterly gross domestic product available to the users' better quality decision making in economic, demographic and social areas will be enabled.

It was noted that the T+60 publication that is called "flash" is not really a flash procedure that is followed in many countries to come to initial estimates at T+45, but already more or less based on similar data sources as the first release at T+70. Term "flash" was changed in term "First estimate" starting with the fourth quarter of 2013.

It is desirable to push back the date of the first release even further, to T+60. It was observed that for most data sources this should already be possible. Some problematic cases remain, but in principle there is no reason why such a push back should not be possible. This is an important aim for follow-up work on QNA.

There is no current plan for real flash estimate at T+45 days.

9.2. FLASH EMPLOYMENT ESTIMATE

There is no any flash employment estimate.

9.3. OTHER EXISTING FLASH ESTIMATE, IF ANY

There is no any other flash estimate.



10. MAIN DATA SOURCES USED

The main data sources used for QNA in the Republic of Croatia are listed in the following table:

No.	Name of the data source	Prod.	Exp.	Inc.	Other
1.	Livestock and poultry slaughtering	x			
2.	Cows' milk and dairy products	x			
3.	Agricultural quarterly price indices	x	х		
4.	Exploitation of forests	x			
5.	Catches of fish and other organisms	x			
6.	Agricultural economic accounts	x			
7.	First and second prospects for real income in agriculture	x			
8.	Industrial production volume indices	x			
9.	Industrial producer price indices	x	x		
10.	Construction work indices	x	х		
11.	Producer building material price indices	x	х		
12.	Retail trade indices	x	х		
13.	Trade and other services' indices	x	х		
14.	Turnover in hotels and restaurants	x	x		
15.	Transport of passengers by transport modes	x	х		
16.	Transshipment of goods	x			
17.	Traffic of passengers in airports	x	х		
18.	Inland water transport	x			
19.	Postal and courier and services	x	х		



20.	Number of persons in paid employment by activities	х	x		x
21.	Average monthly gross earnings	x	x	х	
22.	Consumer price indices	х	х		
23.	Insured persons (pension scheme)	х	х		х
24.	Data on electronic communications	x	x		
25.	Taxable and non-taxable value of goods and services	x			
26.	Net interest income and net income from commissions and fees	x			
27.	Gross written premium (Non-life and Life insurance)	х			
28.	Quarterly taxes from VAT, customs duties and subsidies	x	x	x	
29.	Retail trade data/ Value indices by branches/ detail breakdown		x		
30.	Non-Commercial Tourism Activity in Apartments and summer houses		x		
31.	Tourists arrivals and nights		x		
32.	Data about accomplished sale of electricity		х		
33.	Government Finance Statistics – GFS 2001		х		
34.	Report of revenues and expenses, receipts and expenditure (PR-RAS)		х		
35.	Report of revenues and expenses of budget users (S-PR-RAS)		х		
36.	Data on social benefits in kind		х		
37.	Report of revenues and expenses of non-profit institutions (PR-RAS-NPF)		х		



38.	Short report of revenues and expenses of non- profit institutions (S-PR-RAS-NPF)	x	
39.	Industrial production volume indices-capital goods	x	
40.	Foreign trade in goods	x	
41.	Unit Value Indices	x	
42.	Balance of Payment data	x	x
43.	Cross- border traffic data	x	
44.	Industrial producer price indices on non-domestic market	x	
45.	Report of revenues and expenses, receipts and expenditure (S-PR-RAS) – Gross capital formation (Gross fixed capital formation and changes in inventories)	x	
46.	Report of revenues and expenses, receipts and expenditure (PR-RAS)- Gross capital formation (Gross fixed capital formation and changes in inventories)	x	
47.	Report of revenues and expenses of non-profit institutions - Gross capital formation (Gross fixed capital formation and changes in inventories)	x	
48.	Short report of revenues and expenses of non- profit institutions - Gross capital formation (Gross fixed capital formation and changes in inventories)	x	
49.	Building permit issued	x	
50.	Producers' stock index of industrial final products – gross indices	x	
51.	Eurostat data base - Industrial producer price indices on non-domestic market	х	
52.	Adjustment for the change in net equity of households in pension funds reserves		x



Source 1: Livestock and poultry slaughtering

The reports on livestock and poultry slaughtering (PO-52/M and PO-52/M/OBRT forms) are submitted on monthly basis, separately for legal entities and for tradesmen. This survey serves to collect data on the number of slaughtered livestock by types and categories, their weight before slaughtering (gross weight), the weight of dressed carcass (net weight) and data on coefficients of utilisation.

Name of survey:	The reports on livestock and poultry slaughtering (PO-52/M and PO-52/M/OBRT forms)
Link to surveys undertaken at the European level:	Survey is undertaken according to Council Regulation (EC) No 1165/2008 of the 19. November 2008 concerning livestock and meat statistics and repealing Council Directives (EEC) Nos. 93/23, 93/24 and 93/25
Periodicity:	Monthly
Time of availability of results:	Results are available 22 days after the end of the survey period
Main variables used in QNA:	Indices on net weight of livestock and poultry slaughtered in abattoirs
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 2: Cows' milk and dairy products

Data on the production of milk and dairy products are taken over from the Croatian Agricultural Agency – the Central Laboratory for Milk Control. There are about forty dairies operating in the Republic of Croatia for which the Laboratory makes analysis of purchased milk and from which it collects data on the production. The coverage includes industrial and registered small dairies, classified into section C- Manufacturing, class 10.51 Operation of dairies and cheese making, according to the NKD 2007. The Laboratory processes the collected data and submits them to the Croatian Bureau of Statistics for further processing according to previously defined deadlines and in a suitable format.

Name of data source: Cows' milk and dairy products
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Organization collecting the data:	Croatian Agricultural Agency, Central Laboratory for Milk Control
Periodicity:	Monthly
Time of availability of results:	Results are available 40 days after the end of the survey period
Main variables used in QNA:	Indices on produced and collected cows' milk
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 3: Agricultural quarterly price indices

Agricultural price indices for the Republic of Croatia are calculated on the basis of prices data obtained through monthly surveys on sale and purchase of agricultural products as well as through other surveys carried out by the Croatian Bureau of Statistics, from administrative data of the Ministry of Agriculture and from other administrative sources.

Price indices of agricultural goods output comprises crop and animal output (livestock, poultry and animal products).

Name of survey:	Monthly Report on the sale of agricultural, forestry and fishery products from own production - legal entities and tradesmen (PO-31a / M) Monthly Report on purchase of agricultural, forestry and
	fisheries - family farms (PO-31b / M)
Link to surveys undertaken at the European level:	According to Eurostat Recommendation given in Handbook for EU Agricultural Price Statistics, Version 2.0, Eurostat, 2008 Handbook for EU Agricultural Price Statistics, Version 2.0 Eurostat 2008.
Periodicity:	Monthly
Time of availability of results:	Results are available 45 days after the end of the survey period



Main variables used in QNA:	Price indices of agricultural goods output
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 4: Exploitation of forests

Data on forestry products and felled timber for the reference period are obtained by collection and processing of data on reporting units engaged in forestry and timber felling activities as defined in the NKD 2007 section A Agriculture, Forestry and Fishing, division 02 Forestry and logging.

Data referring to state-owned forests are collected by extracting data from the ŠUM-22/3M form for state-owned forests and ŠUM-24/3M forms for privately-owned forests.

Name of survey:	Quarterly Reports on the exploitation of forests (ŠUM-22/3M form and ŠUM-24/3M form)
Link to surveys undertaken at the European level:	European Parliament and Council Regulation No 614/2007 of 23. May 2007 concerning the Financial Instrument for the Environment (LIFE+) – Commission statement OJ:L 149, 09. June 2007
	Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, p. 23
	Agreement on the content and explanatory notes of the JFSQ (Joint Forest Sector Questionnaire) at the beginning of each year within the Inter-secretariat Working Group (IWG).
	IWG Agreement of 1990 on Forestry statistics (for coordination of statistical activities between OECD, EUROSTAT and the Conference of European Statisticians (UN/CES).)
Periodicity:	Annual and Quarterly
Time of availability of results:	Despite the fact that the surveys are conducted quarterly, only annual data on the exploitation of forests are published. For the purpose of QNA calculation, quarterly data are provided to



	NA based on Gentlemen Agreement 45 days after the end of the survey period.
Main variables used in QNA:	Quantity of forestry products and felled timber
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 5: Catches of fish and other organisms

Data on catches and production of sea fish and other sea organisms are taken over from the Ministry of Agriculture – the Directory of Fisheries, in line with the Co-operation Agreement. Collected data are processed in the Directory of Fisheries and forwarded to the Croatian Bureau of Statistics according to previously arranged deadlines and in a form suitable for the further processing.

Reporting units are legal entities and parts thereof as well as individual fishermen who are engaged in commercial fishing or production of sea fish and other sea organisms according to the records of the Ministry of Agriculture – the Directory of Fisheries on issued licenses.

Name of survey:	Data on catches of fish and other organisms / Ministry of Agriculture – the Directory of Fisheries
Link to surveys undertaken at the European level:	Regulation (EC) 1921/2006 of the European Parliament and of the Council of 18 December 2006 on the submission of statistical data on landings of fishery products in Member States and repealing Council Regulation (EEC) 1328/91
Periodicity:	Quarterly
Time of availability of results:	Despite the fact that the data are taken over from the Ministry of Agriculture on quarterly basis, only annual data on the catches of fish and other organisms are published. For the purpose of QNA calculation, quarterly data are provided to NA based on Gentlemen Agreement 45 days after the end of the survey period.
Main variables used in QNA:	Quantity of cached fish and other organisms
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)



Source 6: Agricultural economic accounts

Economic accounts for agriculture for the Republic of Croatia are based on survey data of the Croatian Bureau of Statistics, administrative data from the Croatian Agricultural Extension Service and the Paying Agency for Agriculture, Fisheries and Rural Development. Economic accounts in agriculture cover the whole agricultural production (by both private family farms and legal entities).

Name of data source:	Release on agricultural economic accounts
Organization collecting the data:	Croatian Bureau of Statistics
Periodicity:	Annual
Main variables used in QNA:	Gross value added of agriculture mainly as benchmark value for agriculture activity

Source: 7 First and second prospects for real income in agriculture

The first and second forecast of real income in agriculture for the Republic of Croatia have been calculated on the basis of survey data of the Croatian Bureau of Statistics, administrative data of the Croatian Agricultural Extension Service and the Paying Agency for Agriculture, Fisheries and Rural Development. The forecasts of real income cover the whole agricultural production (by both private family farms and legal entities).

Name of data source:	Release on first prospects for real income in agriculture and Release on second prospects for real income in agriculture
Organization collecting the data:	Croatian Bureau of Statistics
Periodicity:	Annual
Main variables used in QNA:	Gross value added of agriculture mainly as benchmark value for agriculture activity



Source 8: Industrial production volume indices

Industrial production volume indices are calculated on the basis of data collected for the Monthly Survey on Industrial Production and Persons Employed (IND-1/KPS/M form).

The IND-1/KPS/M Survey covers enterprises and parts thereof employing 20 or more persons and performing one or several industrial activities listed in the NKD 2007 sections B Mining and quarrying, C Manufacturing and D Electricity, gas, steam and air conditioning supply.

Name of survey:	Monthly Survey on Industrial Production and Persons Employed (IND-1/KPS/M form)
Link to surveys undertaken at the European level:	According to Council Regulation (EC) No 1165/98 on Short- Term Statistics and the Eurostat's Recommendations for Publishing of STS Data (of January 2009)
Periodicity:	Monthly
Time of availability of results:	Results are available 30 days after the end of the survey period
Main variables used in QNA:	Industrial production gross volume indices, according to NKD 2007 sections and divisions
Further adjustments made to the survey data:	There is no need for further adjustments of published data

Source 9: Industrial producer price indices

The Industrial producer price index measures changes of producer prices of manufactured goods produced in the Republic of Croatia and sold by producers on the domestic (Croatian) and/or non-domestic (non-Croatian) market. Data are collected through the Monthly survey on Industrial Producer Prices (IND-3/KPS/M form)

The reporting units included in the IND-3/KPS/M Survey are selected enterprises (legal entities and tradesmen) that produce selected products as defined in the Nomenclature of Industrial Products – NIP 2010., classified in the NKD 2007 activity sections B, C D and E (only division 36).

Name of survey:	Monthly Survey on Industrial Producer Prices (IND-3/KPS/M
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	form)
Link to surveys undertaken at the European level:	Concepts and definitions used in the IND-3/KPS/M Survey are harmonized with the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) as well as with the Commission Regulation (EC) No. 1503/2006 on definitions of variables, list of variables and frequency of data compilation.
Periodicity:	Monthly
Time of availability of results:	Results are available 10 days after the end of the survey period
Main variables used in QNA:	Industrial producer price indices according to NKD 2007 sections and divisions
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 10: Construction work indices

Data on construction are collected through reporting method by using the Monthly Report on Construction (GRAĐ-21/M form) and the Quarterly Report on Construction (GRAĐ-21/3M form). The Monthly and the Quarterly Reports on Construction are collected from business entities (legal entities and crafts) and parts thereof employing 20 or more persons classified in the Register of Business Entities to section F Construction according to the NKD 2007. About 950 reporting units are included in the sample.

Name of survey:	Monthly Report on Construction (GRAĐ-21/M form) and Quarterly Report on Construction (GRAĐ-21/3M form).
Link to surveys undertaken at the European level:	The volume indices of construction works are based on the number of hours worked on sites, according to the Methodology of short-Term Business Statistics, Interpretation and Guidelines, Theme: Industry, Trade and Services, ISSN 1725-0099, European Communities, 2006
Periodicity:	Monthly and Quarterly
Time of availability of results:	Results are published 65 days after the end of the survey period. For the purpose of QNA calculation, quarterly data are



	provided to NA based on Gentlemen Agreement 50 days after the end of the survey period
Main variables used in QNA:	Total volume indices of construction works
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 11: Producer building material price indices

Producer building material price indices are calculated on the basis of data collected through the Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form) which is used for the calculation of industrial producer price index – total as well as of its two sub-indices – the industrial price index on the domestic market and on the non-domestic market.

Name of survey:	Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form)
Link to surveys undertaken at the European level:	Concepts and definitions used in the IND-3/KPS/M Survey are harmonized with the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) as well as with the Commission Regulation (EC) No. 1503/2006 on definitions of variables, list of variables and frequency of data compilation
Periodicity:	Monthly
Time of availability of results:	Results are available 15 days after the end of the survey period
Main variables used in QNA:	Monthly building material producer price indices on domestic market
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year



Source 12: Retail trade indices

Data on retail trade indices are based on the Monthly Report on Retail Trade (TRG-1 form). Observation units are business entities (legal entities and tradesmen) registered in the retailing trade as a main activity (section 47 of the NKD 2007.) as well as selected business entities engaged in other activities if performing the retail trade activities.

Name of survey:	Monthly Report on Retail Trade (TRG-1 form)
Link to surveys undertaken at the European level:	The methodology for this survey is based on the Council Regulations Nos. 1165/98 (Annex C), 1158/05, 1503/06 and 1893/06 concerning short-term statistics.
Periodicity:	Monthly
Time of availability of results:	Results are available 45 days after the end of the survey period
Main variables used in QNA:	Value and volume indices of retail sales and price indices
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 13: Trade and other services' indices

Data on trade and other services' indices are based on the Quarterly Report on Trade and Other Services (USL-1 form). The main purpose of the survey is the measuring of turnover changes in service activities. The USL-1 survey is conducted by using the sample method. Sample results are the base for the estimation of the whole population. The sample covers all large and medium-sized (employing 50 or more persons), while micro-sized and small business entities are selected by using a random stratified sample method.

Name of survey:	Quarterly Report on Trade and Other Services (USL-1 form)
Link to surveys undertaken at the European level:	The methodology for the USL-1 quarterly survey is based on the EU Council Regulation No 1165/98 (Annex D) on short-term statistics and its amendments.
Periodicity:	Quarterly



Time of availability of results:	Results are published 75 days after the end of the survey period. For the purpose of QNA calculation, quarterly data are provided to NA based on Gentlemen Agreement 50 days after the end of the survey period
Main variables used in QNA:	Turnover indices by main activities of business entities
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 14: Turnover in hotels and restaurants

Data on turnover in hotels and restaurants and corresponding indices are based on the Quarterly Report on Trade and Other Services (USL-1 form). According to the Regulation on Short-term statistics, accommodation and food service activities (NKD 55 and NKD 56) are part of the list of service sector activities which are included in Quarterly Report on Trade and Other Services (USL-1 form). The main purpose of the survey is the measuring of turnover changes in service activities. The USL-1 survey is conducted by using the sample method. Sample results are the base for the estimation of the whole population. The sample covers all large and medium-sized (employing 50 or more persons), while micro-sized and small business entities are selected by using a random stratified sample method.

Name of survey:	Quarterly Report on Trade and Other Services (USL-1 form)
Link to surveys undertaken at the European level:	The methodology for the USL-1 quarterly survey is based on the EU Council Regulation No 1165/98 (Annex D) on short-term statistics and its amendments. It is fully in line with its concepts and definitions.
Periodicity:	Quarterly
Time of availability of results:	Results are published 75 days after the end of the survey period. For the purpose of QNA calculation, quarterly data are provided to NA based on Gentlemen Agreement 50 days after the end of the survey period
Main variables used in QNA:	Turnover indices by main activities of business entities
Further adjustments	Indices are calculated compared to the average of the



made to the survey data: previous year

Source 15: Transport of passengers by transport modes

Data on transport are collected through weekly, monthly and quarterly statistical surveys. The purpose of the surveys is to collect data on the transport of passengers and goods and to calculate the performance indicators on transport expressed in ton-kilometers and passenger-kilometers. Observation and reporting units on the rail transport, road passenger transport, urban transport, pipeline transport, seawater and coastal transport, and air transport are national carriers, that is, operators registered in the Register of Business Entities of the Croatian Bureau of Statistic.

Data on the registered road motor vehicles and trailer vehicles are obtained from the Ministry of the Interior. The first registration of road vehicles includes new and used vehicles.

Name of survey:	Statistical Report on Road Transport of Goods (PA/T-11 form),
	Quarterly Report on Road Transport of Passengers (PA/M-11 form),
	Quarterly Report on Urban Transport (PG/T-11 form),
	Quarterly Report on Railway Transport (PŽ/T-11 form),
	Quarterly Report on Seawater and coastal transport (PP/T-11 form),
	Quarterly Report on Pipeline Transport (PC/T-11 form)
Link to surveys undertaken at the European level:	The survey (PA/T-11 form) is in line with the statistical standards of the EU (Regulation no. 70/2012 of the European Parliament and the Council, Revised Edition, and all legal amendments and regulations).
	The survey (PŽ/T-11 form) is in line with the statistical standards of the EU (Regulation no. 91/2003 of the European Parliament and the Council, and all legal amendments and regulations).
Periodicity:	Quarterly
Time of availability of	Results are available 42 days after the end of the survey period



results:	
Main variables used in QNA:	Quantitative indicators on the transport of passengers and goods
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 16: Transshipment of Goods

Data on transshipment of goods are collected on the Quarterly Report on the Transshipment of Goods (PR/T-11P form). The purpose of the survey is to collect data on transshipment in seaports, inland waterway ports and other places. Data on the transshipment of goods are submitted by business entities registered in the Statistical Business Register in class 52.24 Transshipment according to the NKD 2007. Business entities that perform transshipment for own accounts are not included.

Name of survey:	Quarterly Report on the Transshipment of Goods (PR/T-11P form)
Periodicity:	Quarterly
Time of availability of results:	Results are available 40 days after the end of the survey period
Main variables used in QNA:	Transshipment of goods in 000 tons
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 17: Traffic of passengers in airports

Data on traffic of passengers in airports are collected by the Monthly Survey on the traffic in airports (PZ/M-21 form). The purpose of the survey is to collect data on the number of aircraft movements as well as on the traffic of passengers and freight in airports and air landing places of the Republic of Croatia. Observation units and reporting units are airports in the Republic of Croatia. Traffic of passengers in airports includes the number of passengers who have departed or arrived on commercial operations.



Name of survey:	Monthly Survey on the traffic in airports (PZ/M-21 form)
Link to surveys undertaken at the European level:	The survey is in line with the statistical standards of the European Union (Regulation no. 437/2003 of the European Parliament and of the Council as well as all statutory amendments and Regulation).
Periodicity:	Monthly
Time of availability of results:	Results are available 40 days after the end of the survey period
Main variables used in QNA:	Traffic of passengers in airports (number of passengers)
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 18: Inland water transport

Data on realized inland waterway transport of goods are collected by the Report on Arrivals of Vessels into Ports of Inland Waterways and by the Report of Departures of Vessels from Ports of Inland Waterways. The purpose of the survey is to collect data on transport of goods in inland waterways of the Republic of Croatia. Collected are the data on quantity of goods transported as well as on ton-kilometers as units of transport performance. Observation units are all arrived or departed vessels on inland waterways.

Name of survey:	Report on Arrivals of Vessels into Ports of Inland Waterways and the Report of Departures of Vessels from Ports of Inland Waterways (PR/M-21a and PR/M-21b forms)
Link to surveys undertaken at the European level:	The survey is in line with the statistical standards of the European Union (Regulation no. 1365/2006 of the European Parliament and of the Council as well as all statutory amendments and Regulation).
Periodicity:	Monthly
Time of availability of results:	Results are available 40 days after the end of the survey period



Main variables used in QNA:	Realized inland waterway transport of goods on rivers (ton-kilometers)
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 19: Postal and courier services

Data on postal and courier services are collected through the Quarterly Reports on Postal Traffic. Data are submitted by legal entities that are either registered or are engaged in the activities classified in division 53 according to the NKD 2007 (Postal and courier activities). Postal and courier services comprise services of delivery of postal consignments. Letters and other consignments include the number of consignments in the domestic traffic and the number of consignments received from abroad and posted abroad in the international traffic. Parcels include the number of parcels received in the domestic traffic and the number of parcels received from abroad and posted abroad in the international traffic.

Name of survey:	Quarterly Reports on Postal Traffic (P-PT/T-11 form)
Periodicity:	Quarterly
Time of availability of results:	Results are published 75 days after the end of the survey period. For the purpose of QNA calculation, quarterly data are provided to NA based on Gentlemen Agreement 50 days after the end of the survey period
Main variables used in QNA:	Number of received and posted letter, parcels and other consignments
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 20: Number of persons in paid employment by activities

The number of persons in paid employment in legal entities is derived from data processing of regular annual and monthly surveys, which comprises 70% of persons in paid employment in each NKD 2007 division. These surveys cover legal entities of all types of ownership, government bodies, and bodies of local and regional self-government units on the territory of



the Republic of Croatia. Data are collected through the report filled in by legal entities on the basis of the records of persons in employment. Data on persons in employment in crafts and trades and freelances are processed according to the records on pension insurance beneficiaries obtained from the Croatian Institute for Pension Insurance.

Name of survey:	Monthly Reports on employees and salaries paid (RAD-1 form)
Link to surveys undertaken at the European level:	Survey is carried out on the basis of national legislation (registered employment)
Periodicity:	Monthly
Time of availability of results:	Results are available 30 days after the end of the survey period
Main variables used in QNA:	Number of persons in paid employment in legal entities by activities
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 21: Average monthly gross earnings

Data on average monthly gross earnings are based on a regular monthly survey covering 70% of persons in employment in each NKD 2007 division. The survey comprises persons in employment in legal entities of all types of ownership, government bodies, and bodies of local and regional government and self-government units, on the territory of the Republic of Croatia. Persons employed in crafts and trades and freelances and insured private farmers are not covered, so data on their payments are not included in the data on average gross earnings. Data on earnings are collected by a report form to be filled in by legal entities on the basis of their respective payrolls

Name of survey:	Monthly Reports on employees and salaries paid (RAD-1 form)
Link to surveys undertaken at the European level:	Survey is carried out on the basis of national legislation
Periodicity:	Monthly



Time of availability of results:	Results are published 60 days after the end of the survey period. For the purpose of QNA calculation, quarterly data are provided to NA based on Gentlemen Agreement 52 days after the end of the survey period
Main variables used in QNA:	Average monthly gross earnings of persons in paid employment
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices (compared to the average of the previous year)

Source 22: Consumer price indices

The CPI in the Republic of Croatia is calculated on the basis of a representative basket consisting of about 794 different items. About 36 110 prices are collected each month in a fixed panel of outlets in nine geographical locations. The classification of products used in the CPI is based on the Classification of Individual Consumption by Purpose (COICOP). The COICOP breaks consumer expenditure into 12 different divisions of consumer goods and services.

Name of survey:	Consumer price indices
Link to surveys undertaken at the European level:	Classification of Individual Consumption According to Purpose – COICOP Eurostat Recommendations on Harmonized Indices on Consumers Prices
Periodicity:	Monthly
Time of availability of results:	Results are available 15 days after the end of the survey period
Main variables used in QNA:	Consumer price indices on a very detail level of COICOP
Further adjustments made to the survey data:	For the purpose of QNA calculation, CPI are calculated compared to the average of the previous year



Source 23: Insured persons (pension scheme)

The Croatian Institute for Pension Insurance (HZMO) is a public institution established by the Act on Pension Insurance whose main activity is to provide rights of employees, farmers, crafts and others persons in the domain of mandatory pension insurance. HZMO collects, publishes and provides data on the number of insured persons by insurance type and economic activities (OS-1 form). Data are published on activity sections level of the NKD 2007 (compatible with NACE Rev.2). According to an agreement between the institutions, HZMO provides data on the number of insured persons by different insurance types on 4-digit NKD 2007 level.

Name of data source:	Report on the insured persons in the pension scheme (OS-1 form)
Organization collecting the data	Croatian Institute for Pension Insurance (HZMO)
Periodicity:	Monthly
Time of availability of results:	Based on the agreement between the two institutions, HZMO delivers data on the number of insured persons in the pension scheme 20 days after the end of the quarter
Main variables used in QNA:	Number of insured persons in the pension scheme
Further adjustments made to the survey data:	Quantitative indicators are calculated as indices based on the average of the previous year

Source 24: Data on electronic communications

Data on telecommunication services are delivered by the Croatian Post and Electronic Communications Agency based on quarterly reports collected from all the operators on electronic communications in the Republic of Croatia. Telecommunication services include the telecommunication traffic realized by all operators on electronic communications through fixed and mobile telephone networks.

Name of data sources:	Quarterly Reports on the electronic communications market
Hame of data sources.	



Organization collecting the data:	Croatian Post and Electronic Communications Agency (HAKOM)
Periodicity:	Quarterly
Time of availability of results:	Based on the agreement between the two institutions, Croatian Post and Electronic Communications Agency delivers data on telecommunication services 50 days after the end of the quarter
Main variables used in QNA:	Value of telecommunication services in mobile and immobile networks
Further adjustments made to the survey data:	Values are calculated as indices based on the average of the previous year

Source 25: Taxable and non-taxable value of goods and services

Tax Administration data on taxable and non-taxable values of goods and services are used in the calculation of the GVA at current prices. These data are obtainable from value added tax (VAT) declarations submitted by entrepreneurs on monthly and quarterly bases. The data are collected separately for legal entities and natural persons. The calculation is done for each group at the 2-digit NKD 2007 level.

Name of data sources:	Tax Administration database extract with data on taxable and non-taxable values of goods and services
Organization collecting the data:	Ministry of Finance / Tax Administration Office
Periodicity:	Monthly
Time of availability of results:	Based on the agreement between the two institutions, the Tax Administration Office delivers data on taxable and non-taxable values of goods and service 50 days after the end of the quarter
Main variables used in QNA:	Indices based on the average of the previous year are calculated and used as additional data source for the calculation of quarterly GVA
Further adjustments	Values are calculated as indices based on the average of the



made to the survey data: previous year

Source 26: Net interest income and net income from commissions and fees

In order to monitor monetary developments and to achieve effective supervision of the banking system, the Croatian National Bank (HNB) requires from all credit institution to complete and submit statistical reports (RDG1-1 form). These Statistical Reports are used for making macroeconomic monetary statistics and for the analysis of financial condition of credit institution over which HNB has oversight.

Credit institutions have an obligation to complete and submit non-consolidated statistical reports on a quarterly basis no later than 25 days from the end of the last reporting quarter. The Report shows all income and expenditures and financial results of the bank during a given period.

Name of data sources:	Aggregated statistical report of credit institutions
Organization collecting the data:	Croatian National Bank
Periodicity:	Quarterly
Time of availability of results:	Reports are available 45 days after the end of reporting period on the Croatian National Bank's web site
Main variables used in QNA:	Net interest income and net income from commissions and fees
Further adjustments made to the survey data:	Values of net interest income and net income from commissions and fees are calculated as indices based on the average of the previous year

Source 27: Gross written premium (Non-life insurance and Life insurance)

The Croatian Financial Services Supervisory Agency is a supervisory body whose scope of activities and competence covers the supervision of financial markets, financial services and supervised entities providing those services.



According to the Statistical Standards for Insurance, all insurance companies are required to keep statistical data on insurance operations, risks covered, insured events and claims. Furthermore, all insurance companies have an obligation to complete and submit tables which are part of the Statistical Standards for Insurance. Through the SP-1-O form (Statistical Insurance data for period), insurance companies provide data on gross written premiums for non-life insurance as well as on gross written premiums for life insurance for the reference period.

Name of data source:	Monthly statistical report on insurance
Organization collecting the data:	Croatian Financial Services Supervisory Agency
Periodicity:	Monthly
Time of availability of results:	Results are available 15 days after the end of the survey period on the Croatian Financial Service Supervisory Agency's website
Main variables used in QNA:	Values of gross written premium for Non-life insurance and gross written premium for Life Insurance
Further adjustments made to the survey data:	Values are calculated as indices based on the average of the previous year)

Source 28: Quarterly taxes from VAT, excise duties, customs and subsidies

Name of data source:	Revenues and expenses for consolidated general government
Organization collecting the data:	Ministry of Finance
Periodicity:	Monthly
Time of availability of results:	Based on the agreement between the two institutions, Ministry of Finance delivers data on quarterly taxes and subsidies on products 45 days after the end of the quarter
Main variables used in QNA:	Quarterly taxes from VAT, excise duties, customs and subsidies



Source 29: Retail trade data/ Value indices by branches/ detail breakdown

Retail trade data are based on turnover of all goods sold and provided on the market in a month, irrespective of whether paid up or not. It also includes the value added tax. Turnover in retail trade is divided into 38 product groups within division 47 of the NKD 2007.

Name of survey:	Retail trade data
Link to surveys undertaken at the European level:	Methodology for this survey is based on the Council Regulations No 1165/98 (Annex C), 1158/05, 1503/06 and 1893/06 Concerning Short-Term Business Statistics.
Periodicity:	Monthly
Time of availability of results:	Results are available 45 days after the end of the survey period
Main variables used in QNA:	Turnover of retail trade data ;detailed breakdown by groups of product

Source 30. Non-profit Tourism Activity in Apartments and summer houses

The subject of this survey are tourists (owners of apartments and summer houses, members of their families, other relatives and friends) who stay in apartments and summer houses, specifically in parts of apartments and houses that are not intended for renting ("private non-rental accommodation").

Name of survey:	Non-profit Tourism Activity in Apartments and summer houses
Periodicity:	quarterly
Time of availability of results:	Results are available 45 days after the end of the survey period
Main variables used in QNA:	Non-commercial tourists turnover



Source 31: Tourists arrivals and nights

Data on turnover of tourists (number of tourist arrivals and tourist nights) are collected from a regular monthly report (TU-11 form). This release contains data on the number of registered persons (owners, their family members, other relatives and friends) in apartments and summer houses for which the sojourn tax is paid as well as the number of registered tourist nights spent in apartments and summer houses

Name of survey:	Tourists arrivals and nights
Link to surveys undertaken at the European level:	All accommodation facilities are categorised according to the Regulation on Classification, Minimum Standards and Categorization of Accommodation Facilities (NN, No 57/95, 110/96, 24/97, 61/98, 137/98, 19/99, 39/99, 52/99, 43/00, 52/00, 57/00, 63/00, 18/01, 33/01, 48/02, 108/02, 132/03, 175/03, 73/04, 106/04, 84/05, 12/06 and 67/06).
Periodicity:	monthly
Time of availability of results:	Results are available 50 days after the end of the survey period
Main variables used in QNA:	Number of accommodation facilities

Source 32: Data about accomplished sale of electricity

Data are taken from Croatian Electricity and show accomplished sales of electricity.

Name of data source :	Croatian Electricity (HEP)
Periodicity:	Quarterly
Time of availability of results:	Results are available 50 days after the end of the survey period
Main variables used in QNA:	Accomplished sales of electricity
Further adjustments	Electricity consumption is estimated on the basis of the data



made to the survey data: on electricity consumed by households

Source 33: Government Finance Statistics

Government finance statistics (GFS) show the economic activities of government, including government revenue, expenditure, government deficit, transactions in assets, transactions in liabilities, other economic flows and balance sheets.

Ministry of Finance provides quarterly GFS data for the internal purposes of the CBS. Data are collected for central government units, extra-budgetary users and for 53 biggest local and regional self-government units.

Name of data source:	GFS – Government Finance Statistics data
Organization collecting the data:	Ministry of Finance
Periodicity:	quarterly and annual
Time of availability of data:	Based on agreement between two institutions, Ministry of Finance delivers data for the CBS - national accounts needs at T+45 days
Main variables used in QNA:	Data on wages and salaries, social contributions, use of goods and services, social security benefits in kind, social assistance benefits in kinds, sales of goods and services.
Further adjustments made to the collected GFS data:	Indices are calculated on the average of the previous year – compensation of employees. Nominal indices are calculated (alternative) – use of goods and services. Sales of goods and services have been analyzed but not used in present QNA calculations because they are cash-based data.

Source 34: Report of revenues and expenses, receipts and expenditure (PR-RAS)

The report of revenues and expenses, receipts and expenditure give a systematic overview of revenues and expenses, receipts and expenditure and of financial results at quarterly and annual level. Financial statements provide an objective and actual picture of the financial position, business operations and cash flows of budget, budgetary and extra-budgetary users.



Name of data source:	Report of revenues and expenses, receipts and expenditure (PR-RAS)
Organization collecting the data:	Ministry of Finance
Periodicity:	Quarterly and annual
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+40 and T+60 days (T+70 days – local and territorial (regional) government units; extra-budgetary users)
Main variables used in QNA:	Components of Final consumption expenditure of general government – at annual level – calculated by the Government Accounts and EDP department of the CBS The same components of Final consumption expenditure have been analyzed at quarterly level but not used in the present QNA calculations due to lack of units coverage and accuracy
Further adjustments made to the collected PR- RAS data:	Detailed descriptions are part of the Croatian GNI Inventory (Chapters 3 and 5)

Source 35: Report of revenues and expenses of budget users (S-PR-RAS)

The report of revenues and expenses of budget users gives a systematic overview of revenues and expenses for the period from January 1 to March 31 and from January 1 to September 30. Financial statements provide an objective and actual picture of the financial position, business operations and cash flows of budget users at quarterly level.

Name of data source:	Report of revenues and expenses of budget users (S-PR-RAS)
Organization collecting the data:	Ministry of Finance
Periodicity:	quarterly (01-03; 01-09)
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+40 days



Main variables used in QNA:	Components of Final consumption expenditure of general government have been analyzed at quarterly level but not used in present QNA calculations due to lack of units coverage and accuracy
Further adjustments	Detail descriptions are part of the Croatian GNI Inventory
made to the collected S-	(Chapters 3 and 5) – applied for data adjustments at annual
PR-RAS data:	level

Source 36: Data on social benefits in kind

The Croatian Health Insurance Fund (HZZO) is a quasi-public body that administers the universal health care system in the Republic of Croatia. The HZZO is the country's national social health insurance fund and is the primary source of health financing.

The HZZO provides approximately 90 % components data of the category social benefits in kind (D.631) at annual level (used for the CBS estimates).

Name of data source:	HZZO financial report; Economic activity indicators of HZZO – Table 1 (data on revenues and expenses)
Organization collecting the data:	Croatian Health Insurance Fund - HZZO
Periodicity:	quarterly and annual
Time of availability of data:	Based on agreement between two institutions, HZZO delivers quarterly data from Table 1 for the CBS - national accounts needs at T+50 days
Main variables used in QNA:	Data provided by HZZO at quarterly level have been analyzed but not used in present QNA calculations because they are volatile cash-based data

Source 37: Report of revenues and expenses of non-profit institutions

The account of revenues and expenses gives a systematic overview of revenues and expenses and of financial results for the period from January 1 to June 30 and from January 1 to



December 31. Financial statements provide an objective and actual picture of the financial position and business operations of non-profit organizations.

Name of data source:	Report (account) of revenues and expenses of non-profit institutions (PR-RAS-NPF)
Organization collecting the data:	Ministry of Finance
Periodicity:	half-year (01-06) and annual (01-12)
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+45 and T+120 days
Main variables used in QNA:	Components of Final consumption expenditure of NPISHs – at annual level. The same components of Final consumption expenditure of NPISHs have been analyzed at a half year level but not used in present QNA calculations due to lack of units coverage and accuracy
Further adjustments made to the collected PR- RAS-NPF data:	Detail descriptions are part of the Croatian GNI Inventory (Chapters 3 and 5)

Source 38: Short report of revenues and expenses of non-profit institutions

This short account of revenues and expenses gives a systematic overview of revenues and expenses for the period from January 1 to March 31 and from January 1 to September 30. Financial statements provide an objective and actual picture of the financial position and business operations of non-profit organizations.

Name of data source:	Short report (account) of revenues and expenses of non-profit institutions (S-PR-RAS-NPF)
Organization collecting the data:	Ministry of Finance
Periodicity:	quarterly (01-03; 01-09)
Time of availability of	Data are processed by FINA (institution authorized for data



data:	processing) for the CBS-national accounts needs at T+40 days
Main variables used in QNA:	Components of Final consumption expenditure of NPISHs have been analyzed at quarterly level but not used in present QNA calculations due to lack of units coverage and accuracy
Further adjustments made to the collected S- PR-RAS-NPF data:	Detail descriptions are part of the Croatian GNI Inventory (Chapters 3 and 5) – applied for data adjustments at annual level

Source 39: Industrial production volume indices-capital goods

Industrial production volume indices are calculated on the basis of data collected for the Monthly Survey on Industrial Production and Persons Employed (IND-1/KPS/M form).

The IND-1/KPS/M Survey covers enterprises and parts thereof employing 20 or more persons and performing one or several industrial activities listed in the NKD 2007 sections B Mining and quarrying, C Manufacturing and D Electricity, gas, steam and air conditioning supply.

Name of survey:	Monthly Survey on Industrial Production and Persons Employed (IND-1/KPS/M form)
Link to surveys undertaken at the European level:	According to Council Regulation (EC) No 1165/98 on Short- Term Statistics and the Eurostat's Recommendations for Publishing of STS Data (of January 2009)
Periodicity:	Monthly
Time of availability of results:	Results are available 30 days after the end of the survey period
Main variables used in QNA:	Industrial production gross volume indices, according to NKD 2007 sections and divisions
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year



Source 40: Foreign trade in goods

After the accession of the Republic of Croatia to the European Union, on 1 July 2013, data on foreign trade in goods statistics of the Republic of Croatia are acquired from two different sources: the Intrastate form for the statistics on the trading in goods between EU Member States (Intrastate) and the Single Administrative Document for statistics on the trading in goods with non-EU countries (Extrastat).

Data source for the statistics on the trading in goods with EU Member States is the Intrastate form used by reporting units to report on arrivals and/or dispatches on the monthly basis, that is, in a month in which goods physically enter or leave the territory of the Republic of Croatia. The reporting units are all business entities, value added tax payers, whose value of trading in goods with EU Member States exceeds the exemption threshold determined for the reference year.

Data sources for the statistics on the trading in goods with third countries, that is, non-EU countries, are Single Administrative Documents on export and import of goods. The Croatian Bureau of Statistics receives the reviewed Single Administrative Documents from the Customs Administration of the Republic of Croatia in the form of data records.

Name of survey:	Foreign trade in goods of the Republic of Croatia
Link to surveys undertaken at the European level:	The legal basis for the Extrastat is the European legislation related to the statistics on the trading in goods with third countries (Regulation (EC) No 471/2009 of the European Parliament and of the Council, the Commission Regulation (EU) No 92/2010 and the Commission Regulation (EU) No 113/2010), the EU Customs Regulations Implementation Act (NN, No. 54/13), the Official Statistics Act (NN, No 103/03, 75/09 and 59/12), the Annual Implementation Plan of Statistical Activities of the Republic of Croatia, the Programme of Statistical Activities of the Republic of Croatia, the Customs Administration Act (NN, No. 68/13) and the Ordinance on Filling the Single Administrative Document (NN, No. 77/13)
Periodicity:	Monthly, quarterly, annually
Time of availability of results:	Results are available 50 days after the end of the survey period, and second version after 62 days after he end of survey period
Main variables used in	Exports and imports of goods by NACE and by SITIC



ONIA	classification
QNA:	classification

Source 41: Unit value indices

Export and import price indices are calculated as unit value indices, in other words, indices of the change of the export and import value per quantity unit of exported/imported goods, that is, per kilogram as a uniform and comparable quantity unit for all goods.

Name of survey:	Unit value indices
Link to surveys undertaken at the European level:	The basic methodological principles for the calculation of export/import prices can be found in the publication entitled Methods Used in Computing the United Nations Price Indexes for External Trade, Volume I, Statistical Papers, Series M No. 82, UN, 1991, as well as in the materials entitled Statistics on the Trading of Goods, User Guide, Annex 8, Foreign Trade Indices, Methodology and Sources, Eurostat.
Periodicity:	quarterly, annually
Time of availability of results:	Results are available 50 days after the end of the survey period
Main variables used in QNA:	Exports and Imports Unit value indices by NACE and SITIC classification

Source 42: Balance of Payment data

The balance of payments of the Republic of Croatia represents a systematic overview of the value of economic transactions performed by the Croatian residents with foreign countries within a particular period.

Name of survey:	Balance of Payment data
Link to surveys undertaken at the European level:	It is compiled in accordance with the recommendations of the International Monetary Fund (Balance of Payments Manual, Fifth Edition, 1993).
Periodicity:	quarterly



Time of availability of results:	Results are available 52 days after the end of the survey period, and second version 62 days after the end of the survey period
Main variables used in QNA:	Exports and imports of goods and services

Source 43: Cross- border traffic

The data for cross-border traffic of passenger cars, buses and their passengers in the road cross-border traffic and the cross-border traffic of passengers in railway traffic, maritime traffic, inland waterway traffic and air traffic are the records of the border police of the Ministry of the Interior.

Name of survey:	Cross- border traffic
Periodicity:	Monthly, Quarterly
Time of availability of results:	Results are available 42 days after the end of the survey period
Main variables used in QNA:	Quantitative indicators on the transport of Cross- border traffic

Source 44: Industrial producer price indices on non-domestic market

The Industrial producer price index measures changes of producer prices of manufactured goods produced in the Republic of Croatia and sold by producers on non-domestic (non-Croatian) market. Data are collected through the Monthly survey on Industrial Producer Prices (IND-3/KPS/M form)

The reporting units included in the IND-3/KPS/M Survey are selected enterprises (legal entities and tradesmen) that produce selected products as defined in the Nomenclature of Industrial Products – NIP 2010., classified in the NKD 2007 activity sections B, C D and E (only division 36).

Name of survey:	Monthly Survey on Industrial Producer Prices (IND-3/KPS/M
,	form)
	Torini,



Link to surveys undertaken at the European level:	Concepts and definitions used in the IND-3/KPS/M Survey are harmonized with the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) as well as with the Commission Regulation (EC) No. 1503/2006 on definitions of variables, list of variables and frequency of data compilation.
Periodicity:	Monthly
Time of availability of results:	Results are available 10 days after the end of the survey period
Main variables used in QNA:	Industrial producer price indices according to NKD 2007 sections and divisions
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year

Source 45: Report of revenues and expenses of budget users (S-PR-RAS)

The report of revenues and expenses of budget users give a systematic overview of revenues and expenses for the period from January 1 to March 31 and from January 1 to September 30. Financial statements provide an objective and actual picture of the financial position, business operations and cash flows of budget users at quarterly level.

Name of data source:	Report of revenues and expenses of budget users (S-PR-RAS)
Organization collecting the data:	Ministry of Finance
Periodicity:	quarterly (01-03; 01-09)
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+45 days
Main variables used in QNA:	Gross fixed capital formation by type of assets and changes in inventories broken down into four types of inventories: finished goods, work-in-progress, raw materials and supplies of traded goods
Further adjustments made to the collected S-	Detail descriptions are part of the Croatian GNI Inventory (Chapters 5) – applied for data adjustments at annual level



PR-RAS data:

Source 46: Report of revenues and expenses, receipts and expenditure (PR-RAS)

The report of revenues and expenses, receipts and expenditure give a systematic overview of revenues and expenses, receipts and expenditures and of financial result at quarterly and annual level. Financial statements provide an objective and actual picture of the financial position, business operations and cash flows of budget, budgetary and extra-budgetary users.

Name of data source:	Report of revenues and expenses, receipts and expenditure (PR-RAS)
Organization collecting the data:	Ministry of Finance
Periodicity:	Quarterly and annual
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+40 and T+60 days (T+70 days – local and territorial (regional) government units; extra-budgetary users)
Main variables used in QNA:	Gross fixed capital formation by type of assets and Changes in inventories broken down into four types of inventories: finished goods, work-in-progress, raw material and supplies and trade goods
Further adjustments made to the collected PR- RAS data:	Detail descriptions are part of the Croatian GNI Inventory (Chapters 5)

Source 47: Report of revenues and expenses of non-profit institutions

The account of revenues and expenses give a systematic overview of revenues and expenses and of financial result for the period from January 1 to June 30 and from January 1 to December 31. Financial statements provide an objective and actual picture of the financial position and business operations of non-profit organizations.

Name of data source: Report (account) of revenues and expenses of non-profit	
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	institutions (PR-RAS-NPF)
Organization collecting the data:	Ministry of Finance
Periodicity:	half-year (01-06) and annual (01-12)
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS - national accounts needs at T+45 and T+120 days
Main variables used in QNA:	Gross fixed capital formation by type of assets and changes in inventories broken down into four types of inventories: finished goods, work-in-progress, raw material and supplies of traded goods
Further adjustments made to the collected PR- RAS-NPF data:	Detail descriptions are part of the Croatian GNI Inventory (Chapters 5)

Source 48: Short report of revenues and expenses of non-profit institutions

Short account of revenues and expenses give a systematic overview of revenues and expenses for the period from January 1 to March 31 and from January 1 to September 30. Financial statements provide an objective and actual picture of the financial position and business operations of non-profit organizations.

Name of data source:	Short report (account) of revenues and expenses of non-profit institutions (S-PR-RAS-NPF)
Organization collecting the data:	Ministry of Finance
Periodicity:	quarterly (01-03; 01-09)
Time of availability of data:	Data are processed by FINA (institution authorized for data processing) for the CBS-national accounts needs at T+40 days
Main variables used in QNA:	Gross fixed capital formation by type of assets and changes in inventories broken down into four types of inventories: finished goods, work-in-progress, raw material and supplies traded goods



Further adjustments	Detail descriptions are part of the Croatian GNI Inventory
made to the collected S-	(Chapters 5) – applied for data adjustments at annual level
PR-RAS-NPF data:	

Source 49: Building permits issued

The monthly Report on Issued Building Permits is collected from the competent administration bodies in counties, major cities and county seats as well as the administrative body of the City of Zagreb and the Ministry of Construction and Physical Planning which issue documents, specified in the Physical Planning and Building Act (NN, No 76/07, 38/09, 55/11, 90/11, 50/12, 55/12 and 80/13), by which the construction is approved (building permits, main design certificate and decision on construction requirements) as well as legal decisions for construction on the basis of the Act on Procedures and Building Requirements for Investment Stimulation (NN, No 69/09, 128/10, 136/12 and 76/13).

Name of data source:	Building permits issued
Organization collecting the	The data are collected by using the reporting method on the
data:	Monthly Report on Issued Building Permits (GRAD-44a form)
Periodicity:	monthly
Time of availability of data:	T+45 days
Main variables used in QNA	Building permits issued on Building

Source 50: Producers' stock index of industrial final products – gross indices

Indices of producers' stock of finished products are chain volume indices of finished products as defined in the Nomenclature of Industrial Products – NIPUM 2009.

Name of survey:	Monthly Survey on Industrial Production Volume Index and Indices of Stocks, Persons Employed and Labor Productivity in Industry
Link to surveys	Concepts and definitions used in the IND-3/KPS/M Survey are



undertaken at the European level:	harmonized with the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) as well as with the Commission Regulation (EC) No. 1503/2006 on definitions of variables, list of variables and frequency of data compilation.
Periodicity:	Monthly
Time of availability of results:	Results are available 10 days after the end of the survey period
Main variables used in QNA:	Indices of producers' stock of finished products

Source 51: Eurostat data base - Industrial producer price indices on non-domestic market

The Industrial producer price index measures changes of producer prices of manufactured goods produced in particular country and sold by producers on non-domestic market.

Name of survey:	Monthly Survey on Industrial Producer Prices on non-domestic market
Link to surveys undertaken at the European level:	Concepts and definitions used in the IND-3/KPS/M Survey are harmonized with the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) as well as with the Commission Regulation (EC) No. 1503/2006 on definitions of variables, list of variables and frequency of data compilation.
Periodicity:	Monthly
Time of availability of results:	Results are available 10 days after the end of the survey period
Main variables used in QNA:	Industrial producer price indices according to NACE 2007 sections and divisions
Further adjustments made to the survey data:	Indices are calculated compared to the average of the previous year



Source 52: Adjustment for the change in net equity of households in pension fund reserves

The adjustment for the change in the net equity of households in pension fund reserves is equal to the total value of the actual social contributions payable into private funded pension schemes.

Name of survey:	Adjustment for the change in net equity of households in pension fund reserves
Link to surveys undertaken at the European level:	No
Periodicity:	Monthly
Time of availability of results:	Results are available 90 days after the end of the survey period,
Main variables used in QNA:	Monthly payments of 2nd. pillar contributions
Further adjustments made to the survey data:	There is no need for further adjustments of published data