The European Union's IPA 2014 Programme

Project 2: ESA 2010 Transmission programme

Description of Sources and Methods Part C, Quarterly National Accounts

ALBANIA

July 2017

IPA 2014 Multi Beneficiary statistical cooperation programme

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Contents

ABBREVIATIONS AND ACRONYMS

COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CCI	Construction Cost Index
CPA	Classification of Product by Activity
CP	Current Price
CPI	Consumer Price Index
EPI	Export price indices
ESA 2010	European System of Accounts 2010
EU	European Union
FISIM	Financial Intermediation Services Indirectly Measured
FSA	Financial Supervisory Authority
FC	Final Consumption
GDP	Gross Domestic Product
GDT	General Directorate of Taxation
GFCF	Gross Fixed Capital Formation
HBS	Household Budget Survey
HCPI	Harmonized Consumer Price Index
HFCE	Household Final Consumption Expenditure
HS	Harmonized System
IMF	International Monetary Fund
INSTAT	Albanian National Institute of Statistics
NA	National Accounts
NACE Rev. 2	Nomenclature statistique des Activités économiques dans la Communauté Européenne, Revision 2
NAD	National Accounts Directorate
NIM	Net Interest Margin
NPISHs	Non-profit Institutions Serving Households
PPI	Producer Price Index
PYP	Previous Year Prices
SNA 2008	System of National Accounts 2008
SUT-s	Supply and Use Table
UVI	Unit Value Index
VAT	Value Added Tax

0 Introduction

The main purpose of National Accounts is to offer an exhaustive description of an economy. In the framework of the complex system of accounts, the quarterly accounts are the most important tool for the short term planning and evaluations of economy policies, both at national level and at union level in the European Union. That is why compiling the Quarterly National Accounts (QNA) and first of all the estimation of quarterly GDP is an obligatory task for all member-states.

The main methodological rules of the QNA are the same as for the annual accounts. The basic legal acts is the new European System of National and Regional Accounts (ESA 2010), as defined in Annex B of the Council Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013.

The European System of National and Regional Accounts (ESA 2010) states: "Quarterly economic accounts form an integral part of the system of national accounts. The quarterly economic accounts constitute a coherent set of transactions, accounts and balancing items, defined in both the non-financial and financial domains, recorded on a quarterly basis. As an integral part of the system of national accounts, using the same principles and definitions, quarterly national accounts aim to provide a measure of quarterly changes in macroeconomic aggregates. They allow economic agents to study business cycles, to statistically measure lags in the effects induced by economic shocks and to analyze dynamics."

In some countries, quarterly national accounts have quite a long tradition while in other countries, like Albania, the compilation started quite recently. The System of National Accounts in Albania till recently was based on SNA 1993 and ESA 1995. As most of the countries are passing to the SNA 2008 and ESA 2010, Albania has to follow the same way. At the same time as Albania doesn't have a full system of annual accounts yet, there are still a number of topics that have to be estimated for the first time.

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 Albania. This description is called "QNA Inventory" and its main purpose is to enable assessment of observance with the European National Accounting standard (ESA 2010) and related legislation. The structure of this document is similar to the "GNI compilation" which relates to the compilation of annual national accounts. Unlike annual GNI compilation, the content of QNA compilation method is less detailed and is focused on specific quarterly issues.

This document encompasses all proposed chapters, including a voluntary chapter dealing with the main quarterly data sources used. A brief description of data sources and compilation methods was

produced within the project IPA 2007 Multi-beneficiary, GNI Inventory Part C and updated during the IPA 2009 Multi-beneficiary project and IPA 2012 Multi-beneficiary project.

It is intended that this QNA compilation method will be regularly updated with the aim to encompass all methodological changes that will be implemented in the future.

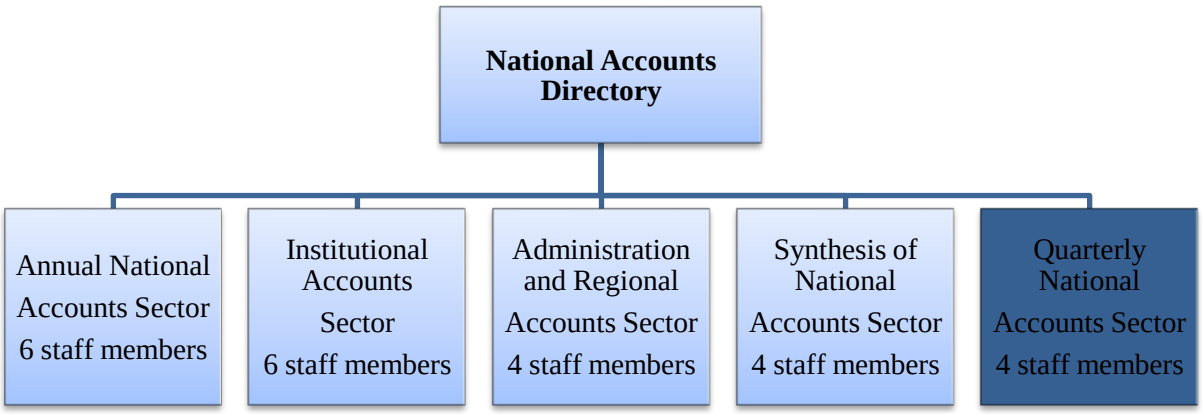
1 Overview of the system of quarterly national accounts

1.1 Organisation and institutional arrangements

In Albania, Quarterly National Accounts (QNA) is compiled by the Albanian Statistical Office (INSTAT). The position of the INSTAT as a central agency is defined by **Law No. 9180, dated 5.2.2004 "On official statistics"**. The mission, tasks, organizational structure, rights and duties of the INSTAT are regulated by the **Programme of official statistics 2017-2021, based on Law No. 9180, dated 5.2.2004 "On official statistics"**, and passed by Parliament in February 2017. INSTAT is an independent institution headed by the General Director, who is appointed by the Prime minister of Albania.

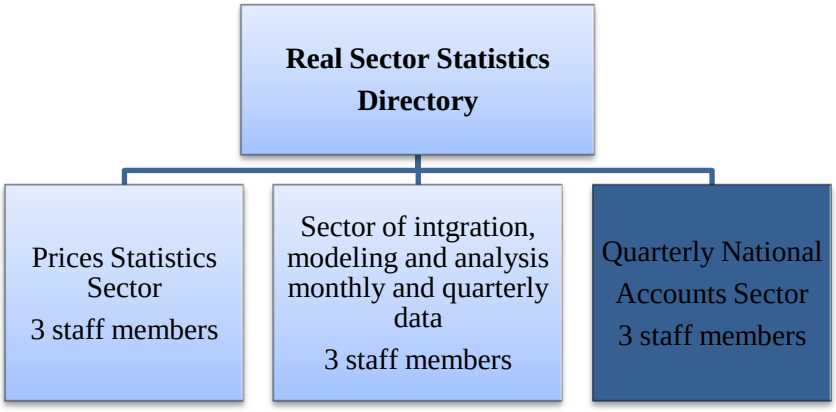
Quarterly National Accounts Sector at the Institute of Statistics in Albania is responsible for the estimation of quarterly gross domestic product (QGDP) by production approach. This sector was created when the National Accounts Department was reorganized to follow the structure recommended by the IMF project during 2008. Based on these recommendations, three subdivisions were established, namely: 1) Annual Accounts Sector; 2) Quarterly Accounts Sector; 3) Development Sector. Each of these sectors has a senior position reporting to the Director of National Accounts.

In 2011 the National Accounts Department was extended with two other sectors according to the structure below:



The Quarterly National Account Sector had 4 staff members, the head of the sector which reports to the Director of National Accounts Department and 3 specialists who reports to the head of the sector.

Since INSTAT reorganized in April 2014, QNA sector is under Real Sector Statistics Department and is reduced by one staff member. The new structure is presented in schema below:



Most of the work related to the compilation of QNA is done by the **Quarterly Accounts Sector**. Quarterly estimates for the general government sector and taxes and subsidies on production are prepared by the **Public Administration and Regional Accounts Sector** which is also responsible for compilation of annual sector accounts for the general government.

A part of QNA computations is done by experts from the **Annual National Accounts Sector**, e.g. estimates of value added in financial intermediation. In these cases it is efficient that one expert is responsible for both quarterly and annual figures.

QNA are compiled in close cooperation with other departments of the INSTAT. Price indices that are used for deflation are taken from the **Prices Statistics Department.** Exports and imports of goods and a significant part of exports and imports of services are compiled by the **External Trade Statistics Department.** Processing of quarterly enterprise surveys is coordinated by the **Structural Surveys Department.**

A part of data sources is obtained from other institutions. Particularly administrative data related to the general government sector and taxes and subsidies on production are taken from the **Ministry of Finance.** Balance of payments is compiled by the **Albanian National Bank.**

Administrative data on Sales/Turnover and numbers of social insurance holders, at detailed level of enterprises, are taken from the **Albania Tax Authority.**

Brief history of QNA in the Albania

For estimation of Quarterly GDP, experimental works started in 2005 under the assistance of the IMF projects, where a lot of work was done on defining the data sources and constructing the methodology used for the estimation of the Quarterly GDP.

The first publication was released in December 2008, of the GVA indicators (without Taxes and Subsidies on products). Included were time series for the period from the first quarter 2001 to the third quarter of 2008 for 7 main branches of economy, the original data and seasonally adjusted data. QNA have been further developed and innovated since that time to fulfill European requirements.

1.2 Publication timetable, revisions policy and dissemination of QNA

Regular estimates of quarterly GVA are published approximately 90 days after the end of the reference quarter. To be reliable to all users and to fulfill the EUROSTAT data transition requirements, it is necessary to estimate and publish the data in a short period of time. Currently, because of delays of data sources we are not able to do this in less than t+90 days. The press release, the quarterly publication and updated figures in the database are available at the website on the day of publication.

1.3 QNA compilation approach

Methodology of QNA follows the European System of Accounts (ESA 2010). Statistical methods used for compiling QNA by the production approach belong mainly to the group of "indirect method", because of the unavailability of relatively extensive direct data sources. The use of indirect procedures consists of disaggregation of annual figures with the help of proxy indicators. Such methods are limited to the cases where sufficient quarterly sources are not available. Generally, the indirect indicators used are turnover indicators. Quarterly enterprise surveys do not collect sufficient indicators to pass to a "direct method". For the government sector, the financial sector and the electricity industry the "direct method" is used.

1.4 Balancing, benchmarking and other reconciliation procedures

At the moment, GDP is compiled using only the **production approach**. Also the main expenditure components of GDP are compiled independently by using the **expenditure approach** and are published for the first time in 9 July 2015, but the balancing process is not carried out. 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. The income approach is not followed yet.

1.5 Volume estimates

General procedure of volume measures calculation consists of two steps: First figures at current prices are converted to previous year's average prices using appropriate price indices. Figures at

previous year's prices are then chain-linked in order to obtain comparable time series of volume measures. Chain-linking of quarterly figures is performed using the annual overlap technique, i.e. figures at previous year's prices are scaled down to the average price level of the chosen reference year using annual deflators. The volume changes are calculated through Laspeyres indices and price changes are consequently calculated as Paasche indices.

1.6 Seasonal adjustment and working day correction

One of the major characteristics and issues of quarterly national accounts is seasonality. Time series of GVA component by A10 main branches of economy, according to the production approach, are available also in seasonally adjusted form. For seasonal adjustment of quarterly time series of GVA a direct seasonal adjustment approaches is used. Adjustments are made using the JDemetra+ program, Tramo/Seats method. Working-day correction is not performed because time series do not show significant effect explainable from the economic point of view.

1.7 Additional information

Regular electronic publication and the complete time series of QNA can be downloaded at the main page related to QNA in Albania: http://www.instat.gov.al/en/themes/national-accounts.aspx

2 Publication timetable, revisions policy and dissemination of QNA

2.1 Release policy

Regular estimates of QNA aggregates are published approximately 90 days after the end of the reference quarter. Press releases include figures of output side of GDP, for the main branches of economy for the last quarter estimated, information about possible revisions and a brief analysis of the current development of the economy.

The publications follow the official **release calendar** which is available on the INSTAT website before beginning of the respective year. Calendar INSTAT publications can be found at: http://www.instat.gov.al/en/publications/calendar.aspx

One of the most important aspects of the quarterly series relates to revisions policies. Using new information available, revisions take place with every new publication of the quarterly figures. These revisions are related with quarterly and annual data changes. The frequency and cause of these revisions are as follows:

Quarterly revisions

As additional data becoming available for the last quarter, they have their impact on the previous quarters because data reported for the last quarter are accompanied by additional source data or improvements/corrections to data for previous nearest quarters. It is necessary to mention that most of the data used for quarterly estimations are administrative. Including data for the last quarter in the series and the subsequent application of the seasonal adjustment will result in some changes to the previous quarters as well.

Annual revisions

Quarterly data are benchmarked to the annual ones, and revisions to annual data will influence the quarterly series. Revisions to annual data are subject to arrival of new annual data sources or improvements of the existing ones. One year typically consisted of three steps of estimation; flash, semi-final and final. Changes that happen during these steps have their direct effect on the quarterly series. Starting from 2017, the flash estimations of the current year will not be publishing, and semi-final estimation are available with a time gap of 15 months and the final version - within 29 months. Revisions to quarterly series are linked to the production cycle of annual estimates.

Methodological revisions

Revisions of quarterly series due to changes in methodology coincide to the greatest extent possible with those in the annual cycle of revisions outlined above. In addition, each of the above causes for revision, and/or the addition of a new series in the actual quarterly series, has the potential to alter seasonal factors and therefore may lead to a revision in the seasonally adjusted series.

The policy for revising the Albania Quarterly National Accounts is shown in the table 1.1.

Table 1.1 Revision policy of the Albanian Quarterly National Accounts (GDP calculation)

Reference Year	Time of publishing	Q1 Year T	Q2 Year T	Q3 Year T	Q4 Year T	Year T
T	End June	First				
T	End September	Revised	First			
T	End December	Revised	Revised	First		
T	End March	Revised	Revised	Revised	First	First Sum of quarters
T+1	End June	Revised	Revised	Revised	Revised	Revised Sum of quarters
T+1	End September					
T+1	End December					
T+1	End March					

T+2	End June	Revised	Revised	Revised	Revised	Semi final Annual Accounts
T+2	End September					
T+2	End December					
T+2	End March					
T+3	End June	Final	Final	Final	Final	Final Annual Accounts
T+3	End September					
T+3	End December					
T+3	End March					

2.2 Contents published

The following quarterly tables are published approximately 90 days after the end of the reference quarter:

Production Approach

Not Seasonally Adjusted Data

- Quarterly Gross Domestic Product, Current Prices;
- Quarterly Gross Domestic Product, Current Prices, Nominal Growth Rates, comparison with corresponding quarter of previous year;
- Quarterly Gross Domestic Product, previous year prices;
- Quarterly Gross Domestic Product, chain-linked volume measures, reference 2010 year (2010=100);
- Quarterly Gross Domestic Product, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with corresponding quarter of previous year;

Seasonally Adjusted Data

- Quarterly Gross Domestic Product, Current Prices;
- Quarterly Gross Domestic Product, Current Prices, Nominal Growth Rates, comparison with previous quarter;
- Quarterly Gross Domestic Product, chain-linked volume measures, reference 2010 year (2010=100);
- Quarterly Gross Domestic Product, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with previous quarter;

Expenditure Approach

Not Seasonally Adjusted Data

- Main components of GDP by Expenditure approach, Current Prices;
- Main components of GDP by Expenditure approach, Current Prices, Nominal Growth Rates, comparison with corresponding quarter of previous year;
- Main components of GDP by Expenditure approach, previous year prices;
- Main components of GDP by Expenditure approach, chain-linked volume measures, reference 2010 year (2010=100);
- Main components of GDP by Expenditure approach, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with corresponding quarter of previous year;

INSTAT have planned to publish in October 2017 the seasonal adjusted time series of the main components of GDP by Expenditure approach which will content the table below:

Seasonally Adjusted Data

- Main components of GDP by Expenditure approach, Current Prices;
- Main components of GDP by Expenditure approach, Current Prices, Nominal Growth Rates, comparison with corresponding quarter of previous year;
- Main components of GDP by Expenditure approach, chain-linked volume measures, reference 2010 year (2010=100);
- Main components of GDP by Expenditure approach, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with corresponding quarter of previous year;

2.3 Special transmissions

All compiled figures, via Excel requirement templates, are sent to Eurostat and IMF. No institution, either domestic or international, is privileged to have the results before the official release.

2.4 Policy for metadata

Not yet available

3 Overall QNA compilation approach

3.1 Overall compilation approach

Quarterly National Accounts are a harmonized system of quarterly time series data adopting the same principles as the Annual National Accounts. Quarterly National Accounts data have a time-series character, which means that they are identical over time and will be amenable to the same estimation principles as the annual series estimates. This is necessary, because by applying the same concepts over time different periods become comparable.

Data sources are an important part of the process, because the results of the quarterly estimation will be based on the quality of data. Quarterly National Accounts in Albania are less complete than annual ones, because the latter use more accurate and timely data sources, such as balance-sheets, annual surveys etc. In general, data consist of either volume or value data. The main data sources that are used to estimate QNA are in general administrative data and various infra-annual data collected by INSTAT's surveys. For most areas of the quarterly accounts the short-term statistics used in the calculation will be replaced by other sources when the annual accounts are compiled. The estimates in the short-term statistics and the annual statistics are rarely totally comparable. Sometimes there are differences in the definition of the variables and even if the definition is the same the estimates will differ due to the fact that annual statistics in general have better coverage.

The statistics that the quarterly accounts are based on are for most areas not as comprehensive as for the Annual National Accounts. Compared to the annual accounts, the single largest difference in the data available is that no information of the companies‟ intermediate consumption is collected. For some variables the source is the same in the quarterly and annual accounts, such as exports and imports, so values from the sources are used directly.

For quarterly GDP compilation by the production and expenditure approach the most useful providers of data are:

- General Directorate of Taxes
- Economic Statistics Directorate (INSTAT);
- Social Statistics Directorate (INSTAT);
- Bank of Albania (BoA);
- Ministry of Finance (MoF);
- Albanian Financial Supervisory Authority;
- Ministry of Agriculture and Food (MAF);

The methodology used considers the development of quarterly series of GDP at current and constant prices. The volume measures are expressed at average prices of the previous year and thereafter

Chain-linked with reference year 2010 (2010=100). The estimates of quarterly GDP are compiled in both original and seasonally adjusted formats for GDP by production approach and original series for main components of GDP by expenditure approach.

The method used to estimate quarterly GDP by **production approach** is considered an indirect method with the partial application of direct method for selected activities. It is considered an indirect method because the quarterly value added is produced based on selected quarterly indicators by application of mathematical methods and statistics techniques. Specifically the applied indirect method is based on the assumption that the proportion between the values added and output is constant within the period of estimation. For estimation quarterly GDP, in Albania, mostly selected indicators are output indicators. VAT data are used mostly instead of Sort Term Survey (STS) data, for constructing quarterly indicators. These data have proven to be more reliable than STS data which have less coverage and response rates. This is not an ideal situation because changes in administrative procedures could quickly change and invalidate quarterly movements.

For some specific branches like Electricity, Public Administration, Education, Health and Financial Activities, for which the direct method is used the estimates of output and intermediate consumption are performed separately, with subsequent calculation of the value added as a difference.

When both quarterly value added series, at current and constant prices are produced, we make the aggregation of these series in 10 branches of the economy to eliminate seasonal effects from both series. After this process, we cannot have exactly the same value between annual and quarterly periods for a specific year, because of seasonal adjustment process.

The compilation of the main components of GDP, according to the **expenditure approach** is based too on an indirect method with the partial application of direct method for selected components, such as exports and imports and Government Final Consumption.

The sequence of compilation steps followed during the indirect method is:

a) Acquisition of source data from surveys and administrative sources.
b) Immediate validation of source data and making possible corrections of the data.
c) Data set and balancing of quarterly data at current and constant prices from different sources for the appropriate recent year.
d) Development of time series for quarterly data, so that different periods are comparable.
e) Benchmarking of the non-seasonally adjusted series to the relevant annual series.
f) Elimination of the seasonality from aggregated quarterly series
g) Comparability of seasonal series.

From the technical point of view, the computational system is based on Microsoft Access and Excel. Analysis of individual data at level of enterprises is performed using Microsoft Access and Excel too. Standardized templates are used for some types of computations, e.g. benchmarking and conversion to previous year's prices.

Classifications used in QNA

The most important classifications used in QNA include the industrial classification of economic activities (NACE Rev 2), the classification of products (CPA), and the classification of individual consumption by purpose (COICOP) and the classification of government is (COFOG). In general classifications used in QNA are more aggregated than those used in ANA due to lower level of detail available from quarterly data sources. Estimates of quarterly GVA is done in A64 breakdowns and published only in A10.

3.2 Balancing, benchmarking and other reconciliation procedures

Quarterly GDP balancing procedure

The balancing process is not carried out. Only for the indirect indicators that are used validation and corrections of source data are carried out, which consists mainly in the proper assignments of principal activities for units that are subject to organizational changes, corrections of obvious mistakes in surveys, etc. If the data delivered from the source statistics for some reason seems questionable contacts are taken with persons at the source statistics to discuss the results. This could lead to adjustments of the data for the NA calculations. Conceptual adjustments are made due to differences between business accounting rules and national accounting rules. Explanations of larger deviations from a "reasonable" development of the variables according to the time series are sought.

When reliable quarterly data for some conceptual adjustment or adjustment for exhaustiveness are not available, estimates based on the quarterly pattern of surveyed data or expert opinions are used.

Benchmarking of QNA and ANA

Benchmarking has two main aspects, which in the QNA context are commonly looked upon as two different topics; these are (a) quarterization of annual data to construct time series of historical QNA estimates ("back series") and revise preliminary QNA estimates to align them to new annual data when they become available, and (b) extrapolation to update the series from movements in the indicator for the most current period ("forward series"), (IMF manual, chapter 6).

The aim of benchmarking is to ensure the consistency between Quarterly and Annual National Accounts. It should be applied to both current and constant price data, where the constant price data

are expressed in prices of the same base year as the annual data. Quarterly indicators are benchmarked with annual VA for each A64 breakdowns, in current and previous year prices carried out by using the XLPBM Excel programme. The XLPBM Excel programme has been developed by the IMF 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 minimized. The result is the achievement of consistency of quarterly and annual data, that is, the sum of quarterly data is equal to annual data in every year.

The general objective of this method is to preserve as much as possible the short-term movements in the original quarterly data under the restrictions provided by the annual data. The method can be described as a minimization of the following formula:

$$\min \sum_{t=2}^{T} \left[\frac{X_t}{I_t} - \frac{X_{t-1}}{I_{t-1}} \right]^2$$

Under the annual constraints:

$$\sum_{t=4y-3}^{4y} X_t = A_y \qquad y = 1,\ldots,n$$

X_t is the revised (adjusted) quarterly value for quarter t
I_t is the original quarterly value (indicator) for quarter t
A_y is the annual value for year y
t is time in quarters (t=1,... ,T)
T is the last quarter
y is time in years (y=1,... ,n)
n is the last year

Series are benchmarked with annual VA since the year 2008 until the latest existing period. When annual data are not available they are extrapolated with quarterly indicators. Time series of GDP by production approach will be back casted since 2001 year and will be published in the end of 2015 year.

3.3 Volume estimates

Quarterly National Accounts, to ensure better consistency with the Annual estimates, as well as complying with ESA 2010, the volume measure of quarterly time series are expressed in average prices of the previous year and chain-linked reference year (2010=100).

General procedure of volume measures calculation consists of two steps: First figures at current prices are converted to previous year's average prices using appropriate price indices. Figures at previous year's prices are then chain-linked, with the reference year (2010=100), in order to obtain comparable time series of volume measures over time. This approach was introduced for the first time in quarterly accounts during the publication of the first quarter 2014. In the past, different approach was applied, where current price data were converted to constant prices of the fixed base year (the base year was 2005). Volume measures calculated using the current methodology is much less biased by gradual out-of dating of the chosen base year's weights.

Calculation of figures at previous year's prices mostly consists of following steps:

- Quarterly base price indices are taken from price statistics.
- Annual base price indices are computed as weighted averages of quarterly base price indices with weights from current prices.
- Quarterly price indices to average of the previous year are computed as quarterly base price indices divided by annual base price indices for the previous year.
- Quarterly figures at average prices of the previous year are computed as current prices divided by quarterly price indices to average of the previous year.

Chain-linking of quarterly figures

Chain-linking of quarterly figures is performed using the Annual Overlap technique, i.e. figures at previous year's prices are scaled down to the average price level of the chosen reference year using annual deflators. This technique is used in the majority of member states of the European Union. Chain linking means constructing long run volume measures by cumulating movements in short term indices with different base periods. The chain-linking of quarterly GDP data with fixed reference period (2010=100) allow different periods to be compared in a consistent manner and provide measures of long-run changes.

However, the users should be aware of the phenomena of (non-additive problem) of chained data. For example if quarterly time series of GDP at current and constant prices with average prices of the previous year are additive, where total GDP is the sum of the components, for chain linking series, with fixed reference period (2010=100) the total GDP will be non-additive.

The real growth rate is estimated using quarterly chain-linked series, with the reference year 2010 (2010 = 100).

Volume measures are presented in following ways:

- Figures at previous year's prices in million Leke
- Chain-linked figures with reference year 2010=100 in million Leke
- Percentage changes in volume calculated with respect to the corresponding quarter of the previous year
- Contributions to variation in GDP

As regards seasonally adjusted volume measures, percentage changes are calculated with respect to the previous quarter.

3.4 Seasonal adjustment and working day correction

One of the major characteristics and issues of quarterly national accounts is seasonality. There are two methods for eliminating the seasonal effect from quarter series.

Indirect method

The level at which a series is seasonally adjusted is important, since it has the potential to affect the quality of that seasonally adjusted series. The individual component series of the main economic variables can be seasonally adjusted and then summed to derive totals. This is called an indirect seasonal adjustment. The indirect approach has the advantage of retaining additivity, but this applies only to the current price series. Although the indirect approach conceptually also provides additivity for volume series, additively is lost by chain-linking.

Direct method

Alternatively, the main economic variables can be seasonally adjusted at the total level, independently from the seasonal adjustment of their components. The adjustment of the total of an aggregate series is called a direct seasonal adjustment. The direct approach often gives better results if the component series show similar seasonal patterns. At the most detailed level, the irregular factor may be large compared with the seasonal factor and therefore makes it difficult to perform a proper seasonal adjustment.

In a small country such as Albania, irregular events can have a strong impact on particular data. However, if the component series show the same seasonal pattern, aggregation often reduces the impact of the irregular factors in the component series. This is particularly relevant for Albania,

where many economic series are affected by same seasonal fluctuations in the primary industries.

Seasonal adjustment of quarterly time series of GVA is done in A10, main branches of economy is used mostly direct seasonal adjustment approach. Adjustments are made using the JDemetra+ program, Tramo/Seats method.

Revision policy of seasonally adjusted data is different from that applied for raw data. Once a year, within estimate for 1st quarter (end of June), whole time series of adjusted data are revised. Simultaneously new identification of models and estimation of their parameters is done. At the same time, possible methodological changes may be implemented (e.g. switch to newer version of the adjustment method). Within estimates for the other quarters, revision of adjusted data is limited only to periods for which raw data are revised.

4 GDP components: the production approach

For the calculation of Quarterly Gross Domestic Product (QGDP), INSTAT use the production approach and the expenditure approach, income approach is not developed yet. 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, also because the expenditure approach recently is introduced in QNA in Albania. Since the QGDP is calculated mostly using an indirect method, the quarterly gross value added (QGVA) is calculated solely, 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.

4.1 Gross value added

Gross value added, including industry breakdowns (but excluding FISIM)

The methodology of QNA follows the European System of Accounts (ESA 2010). Statistical methods used for compiling QNA belong mainly to the group of “indirect methods”, because of the unavailability of relatively extensive direct data sources. As mentioned above, the general objective of these methods is to preserve as much as possible the short-term movements in the original quarterly data under the restrictions provided by the annual data. For the government sector, financial sector and electricity industry “direct methods” are used. Administrative adjusted data, mostly VAT data, are used as output indicators instead of Short Term Survey (STS) data as used for most of the other branches.

GVA is compiled at most detail level at A64, part of NACE Rev.2. The sections breakdown and indicators used are as follows:

4.1.1. Agriculture, Forestry and Fishing (A)

Estimations for section **A**, **Agriculture, hunting, forestry and Fishing** are based on the "indirect method". Data for estimation these groups are taken from the Ministry of Agriculture and are annual data. For each year the Ministry of Agriculture sends to INSTAT two forecasts (estimated based on their methods) and the evaluation when the year is closed (estimated based on annual survey results). The Agriculture Section which is under the Agriculture Department in INSTAT processes the data at quarterly frequencies. No quarterly data for estimating intermediate consumption (IC) are available, so the output indicator is used for evaluating quarterly VA.

4.1.2. Manufacturing, Mining, Quarrying and other industries (B, C, D, E)

The estimation of gross value added for the activities **Extracting industry (B), Manufacturing industry (C)** and the activity **Water supply, sewerage, waste management and remediation activities (E)** are compiled at 2-digit levels NACE Rev.2, using the "indirect method". Mostly value data are used for estimation these groups which are taken from the VAT file and from STS. Some quarterly volume data are taken from other administrative sources, especially for the extracting industry, which are used for extrapolating quarterly Value Added (VA) at current prices for extracting of Oil industry. The output indicator is used for evaluating quarterly VA.

For evaluating section **D, Electricity, gas, steam and air conditioning,** the "direct method" is used. Value and volume data are taken directly from production, distribution and transmission companies. Based on those data output and IC indicators at quarterly frequencies are estimated which are available since the first quarter of 2009; quarterly VA estimates for the years before are based on the "indirect method" using the turnover indicator.

4.1.3. Construction (F)

Sections **F, Construction** is compiled using the "indirect method". Mostly value data are used for estimating these groups which are taken from VAT file and STS. From other administrative sources are taken quarterly volume data which especially are used for validation and reconciliation procedures. The output indicator is used for evaluating quarterly VA. The estimations are done at current and constant prices as the whole Construction industry and not detailed as Construction of buildings, Civil engineering and Specialized Construction activities.

4.1.4. Wholesale and Retail trade, Transportation and storage, Accommodation and Food service activities, Information and Communication services (G, H, I, J)

Despite the fact that value added for Sections **G**, **H** and **I** is usually shown at aggregated level, calculations are carried out separately for each of those activities at detailed 2-, 3- or 4-digit levels of NACE Rev.2. The output indicator is used for evaluating quarterly VA.

For compiling value added in section **G (Wholesale and retail trade; repair of motor vehicles and motorcycles)** is used the "indirect method". Main data sources used are retail trade indices from Retail trade and turnover data which are taken from the VAT file and STS. Estimations are carried out separately for each activity at 2-digit levels NACE Rev.2.

For estimation group 45 - Wholesale and retail trade and repair of motor vehicles and motorcycles and group 47 - Retail trade, except of motor vehicles and motorcycles, turnover data by main activities of business entities which are based on the quarterly report on trade and other services, taken from STS, are adjusted with fix annual Output/Turnover ratio at the 3- or 4-digit NACE Rev.2 levels, to obtain the series of quarterly Output. Current prices of the Value Added are obtained by extrapolated with quarterly Output indicators.

For estimation group 46 - Wholesale trade, except of motor vehicles and motorcycles, turnover data by main activities of business entities which are based on the quarterly report on trade and other services, taken from VAT file, are adjusted with fix annual Output/Turnover ratio at the 2-digit NACE Rev.2 levels, to obtain the series of quarterly Output. Current prices of the Value Added are obtained by extrapolated with quarterly Output indicators.

For evaluation of section **H**, **Transportation and storage services**, section **I**, **Accommodation and food services** and section **J**, **Information and communication services**, are based on the "indirect method" for each activity at 2-digit levels NACE Rev.2. Value added at current prices is evaluated based on the turnover indicators by main activities of business entities which are taken from the VAT file and from STS.

From other administrative sources are taken quarterly volume data such as number of passengers-kilometers, import of vehicle and motorcycles, number of tourist arrivals and tourist nights etc, which especially are used for validation and reconciliation procedures.

Weighted deflators composed of appropriate consumer price indices (on 3- or 4- digit COICOP levels) are used for estimation of value added at constant prices.

4.1.5. Financial and Insurance activities (K)

Section **K**, **Financial Corporation's sector (S.12)** consists of institutional units which are independent legal entities, market producers and whose principal activity is the production of financial services.

These institutional units are all corporations and quasi corporations which are principally engaged in:

- Financial intermediation (NACE 64);
- Insurance companies and pension funds (NACE 65);
- Auxiliary financial activities (NACE 66), not data available for estimation

For evaluating quarterly VA for Financial Corporation's sector the "indirect method" has been used. An output indicator estimated only for Central Bank and Commercial banks, was used for evaluating quarterly VA. Since June 2014 the new method is introduced, the "direct method" has been developed for evaluating quarterly VA for Financial activity following the ESA 2010 methodology, for times series since the first quarter of 2008 which is almost the same as annual estimation does, except the Insurance companies and pension funds (NACE 65) for which the "indirect method" is used yet.

The current situation related to the classification of the financial sector from the available sources is shown in

Activity code	Activity	Sub-Sector	Type of producer	Main sources
K.64	Financial service activities, except insurance and pension funds	S.121 S.122 S.125	Market & non-market	Quarterly profit and loss account, Monetary statistics, detailed structure of loans and deposits and accrued interest on loans and deposits, interbank loans and deposits, questionnaire on Bank of Albania expenditures. **All sources are available from Bank of Albania**
K.65	Insurance, reinsurance and pension funding	S.128	Market	Data from Albanian Financial Supervisory Authority (AFSA)

Table 1.2: Classification of financial sector in Albania

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K.65	Insurance, reinsurance and pension funding	S.128	Market	Data from Albanian Financial Supervisory Authority (AFSA)

Financial service activities, except insurance and pension funds, (NACE 64)

This division comprises Sub-sector 121 (Central Bank), Sub-sector 122 (Other deposit-taking corporations, except central bank) and Sub-sector 125 (other financial intermediaries, except insurance corporations and pension funds).

Sub-sector (S 121) Central Bank: is the national financial institution that exercises control over key aspects of the financial system. This sub-sector comprises: the national central bank, including where it is part of a system of central banks; currency boards or independent currency authorities that issue national currency fully backed by foreign exchange reserves; and central monetary agencies of essentially public origin (for example, agencies managing foreign exchange or issuing banknotes or coins) that keep a complete set of accounts but are not classified as part of central government. In the case of Albania in this subsector is included the Central Bank of Albania.

Following ESA 2010 methodology, the output for this subsector is calculated as Non-market output (P.132), thus as sum of costs.

Data sources:

- Quarterly questionnaire that retrieves data on: Intermediate consumption (P.2), Wages and salaries (D.11) and Depreciation (K.1)

Sub-sector 122 (Other deposit-taking corporations, except central bank); in this sub-sector are included the financial institutions that have financial intermediation as their principal activity. They incur liabilities in the form of deposits or financial instruments that are close substitutes for deposits. In general, this sub-sector comprises commercial banks, universal banks, all-purpose banks, savings banks (including trustee savings banks and savings and loan associations), post office giro institutions, post banks, giro banks, rural credit banks, agricultural credit banks, cooperative credit banks, credit unions, and specialized banks or other financial corporation's if they take deposits or issue liabilities included in the national definition of broad money. There are two types of financial services;

1. Financial services provided in return for explicit charges;
2. Financial services provided in association with interest charges on loans and deposits which is recorded as FISIM;

This sub-sector comprises the sixteen commercial banks operating in Albania.

Data sources:

- Quarterly profit and loss account (Source: Bank of Albania)
- Detailed structure of loans and deposits for sub-sectors S.122 and S.125 by currency and accrued interest on loans and deposits by currency, each divided in institutional sector users (Source: Bank of Albania)
- Monetary Statistics (Source: Bank of Albania)
- Inter-bank loans and deposits (Source: Bank of Albania)
- Loans to households by district and purpose (Source: Bank of Albania)
- Loans by economic activity (Source: Bank of Albania)
- Monthly interest rates on loans and deposits (Source: Bank of Albania)

Methodology and estimation techniques:

The output of this subsector is calculated explicitly and implicitly

- Market output (Explicit)= Income from fees and commissions + other operating income(margins on trading securities)
- FISIM (Implicitly)= FISIM on loans + FISIM on deposits
- Intermediate Consumption= Commission expenses + other administrative expenses

Sub-sector 125 (Other financial intermediaries except insurance corporations and pension funds OFI); OFI data are included in GDP estimates. Quarterly income statement data for OFI are sent from the Bank of Albania. Based on these data the quarterly OFI output and GVA are estimated. Their output is measured in the same way as output of ***S.122*** that is measured directly (charges and fees, commissions, margins on the trading of securities and foreign exchange) and financial intermediation services indirectly measured (FISIM), which is incorporated in ***S.122*** because data on stock of loans and deposits are reported together (***S.122***+***S.125***).

Insurance, reinsurance, and pension funding, except compulsory social security (NACE 65)

For ***NACE 65*** activity, only annual detailed data are available from Albanian Financial Supervisory Authority (AFSA). For compiling the value added at quarterly bases for this activity is used the "indirect method". Adjusted values of gross written premium for non-life insurance and gross written premium for life insurance together with number of persons in paid employment by activities and number of insured persons are used for estimation of value added in constant prices in the ***NACE 65 - Insurance, reinsurance and pension funding, except compulsory social security***. Appropriate consumer price indices are used for obtaining the current price estimates. For pension funds no data is available.

4.1.6. Real estate activities (L)

Sections **L**, **Real Estate Activities** are compiled using the "indirect method". Mostly value data are used for estimating these groups which are taken from VAT file and STS. From other administrative sources are taken quarterly volume data which especially are used for validation and reconciliation procedures. The output indicator is used for evaluating quarterly VA. The estimation for Imputed Rent is carried out separately, for which the "indirect method" is used also. Quarterly VA indicator is constructing using User Cost Approach.

4.1.7. Professional, Scientific, Technical, Administrative and Support services (M, N)

Despite the fact that value added for Sections **M** and **N, Professional, scientific, technical, and administrative and support service activities,** is usually shown at aggregated level, calculations are done separately for each of those activities at 2-digit levels NACE Rev.2.

Tax Administration data on taxable and non-taxable values of goods and services which are taken from VAT file and turnover data from STS are used as main data source for the extrapolation of value added for service activities. The "indirect method" is used.

4.1.8. Public administration and defense, Education, Human health and Social work activities (O, P, Q)

Related to sections **O, P** and **Q, Public administration and defense, education, human health and social work activities** the "direct method" is used. Evaluation of quarterly VA is based on quarterly data which are taken from the database of the Ministry of Finance (government budget) and for the general government sector (S. 13) they are very similar to the annual ones. There are bridges tables between indicators used in financial statements and in the budgetary classification on one hand and indicators of national accounts on the other hand. The **cost method** is used for non-market activities. Output is given as a sum of intermediate consumption and VA. Quarterly data on compensation of employees, other taxes on production and other subsidies on production are available, too. As for market activities, output is given as a sum of special types of revenue, GVA as a difference between output and intermediate consumption.

For **Education** and **Health,** quarterly VA for the public part is calculated based on **the cost method** using quarterly data which are taken from the database of the Ministry of Finance (government budget) and for the private part the "indirect method" based on value and volume output data (VAT file and other administrative sources) is used.

4.1.9. Other service activities (R, S, T, U)

Quarterly value added compilation at current and constant prices for the sections **R, S, T** and **U, Other service activities** (which are presented together) is the same as for sections **M** and **N, Professional, scientific, technical, and administrative and support service activities** (section 4.1.7).

4.2 FISIM

So far, in Albania, the concept of **FISIM** was considered in the national accounts as part of the output of banking. The FISIM in quarterly frequencies was estimated following the "indirect method". The interest margin was calculated as a property income (interest and dividends) minus the interest paid. However, the interest margin was not imputed to users, but the total amount was charged to value added.

Since June 2014, as for Financial Activity, also for FISIM, the new calculation is made possible by collecting new detailed data, in order to compile FISIM in accordance with ESA 2010 and SNA 2008. Since the new concept of FISIM consists of FISIM on loans and deposits, data sources used related to assets and liabilities of the banking system.

FISIM (P.119)

The new calculations of FISIM were performed for subsectors S.122 (deposit-taking corporations except the central bank) and S.125 (other financial intermediaries, except insurance corporations and pension funds). According to 1993 SNA (Para 6.134), the money lenders who lend their own funds do not generate output since they do not engage in financial intermediation activity. This treatment, however, was revisited in 2008 SNA, in which no exclusion is made for lending of own funds, and a service charge including FISIM associated with lending is recognized as an output (2008 SNA, Para 17.251). *Following 2008 SNA and 2010 ESA, FISIM was not calculated for the central bank.*

The total FISIM was calculated as the sum of the bank interest income on loans less the ESA interest on the same loans plus the ESA interest on deposits less the bank interest expenditures on the same deposits. Exports of FISIM were estimated using the external interbank reference rate, for loans granted to non-residents (excluding FIs) and for deposits of non-residents (excluding FIs).

Various source data; mostly monthly, published on Bank of Albania website were utilized. Since bank interest is reported with no additional detail, these detail were reconstructed based on the stock data by sector and maturity and detailed effective interest rates using the following compound interest formula:

$$\text{Interest income} = PV((1+i)^{n} - 1)$$

Where: PV – stock of relevant instrument for previous month

i - Annual interest rate for current month

n=1/12 (one month of the year)

The **internal reference rate** was used to calculate FISIM of the resident financial intermediaries by resident user institutional sector. The internal reference rate was calculated as weighted average of rates on interbank loans and deposits using compound interest formula based on interest receivable on bank placements (assets) and interest payable on interbank placements (liabilities).

$$i=(I/PV+1)^{\wedge}4-1,$$

Where: i - Annual interest rate for current quarter,

PV – stock of relevant instrument for previous month

I - Interest income in banks' placements

Since most of interbank deposits are with non-resident banks and in EUR, the resulted RR rate on deposits is validated against interbank reference rate within the Economic and Monetary Union: **Euribor®** (Euro Interbank Offered Rate).

The **external reference rate** was calculated for estimates on export and import of FISIM. The reference rate used is the average interbank rate weighted by the level of stocks of loans and deposits between resident financial intermediaries and non-resident financial intermediaries.

FISIM allocation

The allocation of FISIM was not performed before. Based on available data on stocks of ODCs and OFI loans by sector, activity and by type, the FISIM allocation to various users was performed following 2008 SNA and ESA 2010 (Para. 14.15), as follows:

a. For final consumption of households and intermediate consumption of non-market producers such as, Government, households as final consumers.
b. For intermediate consumption of market producers (non-financial corporation's at the level of NACE 2 digit activity, other financial corporations, households as owners of dwellings.
c. Exports.

The FISIM charges relating to interest payments on the mortgage loans were treated as part of the intermediate consumption of the production activity associated with renting the property (either for use by the owner or by a tenant), following 2008 SNA, Para. 24.58.

For final consumption of households and intermediate consumption of non-market producers consists of FISIM on:

(i) Government.

A. S.122 FISIM on government loans +
B. S.122 FISIM on government deposits +
C. S.125 FISIM on government loans

(ii) Households as final consumer

A. S.122 FISIM on HH consumer loans +
B. S.122 FISIM on deposits +
C. S.125 FISIM on HH consumer loans +
D. S.125 FISIM on HH deposits

For intermediate consumption of market producers the FISIM was allocated to the following constituencies:

(iii) Non-financial corporation

A. S.122 FISIM on NFC loans +
B. S.122 FISIM on NFC deposits +
C. S.125 FISIM on NFC loans+

(iv) FISIM for other financial corporations

A. S.122 FISIM on NFC loans +
B. S.122 FISIM on NFC deposits

(v) Households as owners of occupied dwellings

A. S122 FISIM on HH loans *share of mortgage loans in total loans to HH +
B. S125 FISIM on HH loans *share of mortgage loans in total loans to HH

The allocation of FISIM among user activities in Bank of Albania aggregation was based on the stocks of loans of each industry. Since attribution of loan stocks to activities was available only at aggregated level, further split into NACE rev.2 2 digit level was done based on the output of each industry.

4.3 Taxes less subsidies on products

Taxes on products (D.21)

The Ministry of Finance provides quarterly data on taxes on products broken down into the following types of taxes:

- ☐ Domestic taxes
  - Value added tax (simply time-adjusted method is usually made in order to obtain the accrued value, since Ministry of Finance records are cash-based)
  - Excise duty
    - Alcoholic drinks
    - Fuel
    - Others
    - Packaging (plastic, glass)
  - Other taxes on products
- ☐ External taxes
  - Value added tax
  - Excise duty
    - Coffee
    - Cigarettes
    - Alcoholic drinks
    - Fuel
  - Custom duty

The process of deflation is done taking into account this breakdown. The conversion of domestic taxes from current prices into previous year prices is done as follows:

- **VAT** (import + domestic), made proxy 70% of total value of all taxes, in previous year prices is estimated based structure of VAT on HFCE adjusted (COICOP 4-digit)
- **Domestic Excise** and **Other taxes** are estimated in previous year prices by applying to the respective quarterly GVA in previous year prices the share of the previous year of annually domestic tax on GVA for each type of tax respectively
- **Excise duty** in previous year prices is estimated based on the share of the previous year of Excise Duty on CIF value (CN 8 digit) of imported products on which is paid excise duty
- **Custom duty** in previous year prices is estimated based on the share of the previous year of custom duty on CIF value of imported products on which is paid custom duty.
-

Subsidies on products (D.31)

The main data sources are administrative data from the Ministry of Finance. The data are part of the transactions that are made from the Government. They are reported monthly and are easily transformed into quarterly data.

Subsidies on products are divided into:

- Import subsidies (D.311)
- Other subsidies on products (D.312)

No import subsidies are provided in the Albanian Economy.

Other subsidies on products include subsidies:

- on drinkable water
- on services of railway transport of goods
- on services of passenger transport
- on services of student treatment enterprise

Subsidies on products are assumed as a negative tax on products according to the national accounts methodology. The total subsidies on products are subtracted when GDP is calculated.

When estimating subsidies on products in constant prices, the following price indices are used:

- Drinkable water is deflated with CPI for water.
- Railway transport of goods is deflated with CPI for transport.
- Passenger transport is deflated with CPI for transport.
- Student treatment enterprise is deflated with Total CPI.

5 GDP components: the expenditure approach

Quarterly GDP by expenditure approach started in year 2010, under the IPA 2007 national project, with collection and analyzes of availability for data sources and constructed the base methodological framework. The first experimental estimates of main components of quarterly GDP by expenditure in current prices were done under IPA 2007 national project. The main data sources used are described in chapter 10, Main Data Sources used. IPA 2011 project carried on the improvements of implementation process with experimental estimates of main components of GDP by expenditure in constant prices. These results of main components in current and constant prices were published for the first time on 9 July 2015.

From the expenditure side of quarterly GDP following components are calculated: Final household consumption expenditure; General Government expenditure separated in individual consumption expenditure and collective consumption; NPISHs consumption expenditure; Gross fixed capital formation; Net exports separated in import of goods and services and export of goods and service.

5.1 Household final consumption expenditure

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

HFCE is the main component of GDP and made proxy 70% of GDP. Household final consumption is compiled on a detailed level COICOP 4-digit, in accordance with consumption purposes. The calculations are mostly based on extrapolation and many different sources are used to get indicators for the extrapolation. The main source is Turnover Statistics which accounts the most part of total household consumption. Besides Turnover Statistics a lot of other sources are used. For some consumption purposes, like energy, where one large company is dominant specific inquiries are used, or information is collected through the company's quarterly financial statements and from administrative data sources. Household Budget Survey (HBS) is carried out only in annual bases, instead in quarterly it was not available, taking into account the availability of data sources, mainly are used statistics of retail sales and short term business statistics for the estimation of HFCE. The information collected from the survey of retail sales is converted in expenditure of goods through a transformation matrix (bridge table).

Transformation matrix (bridge table) **-** is used to split the turnover figures from the Turnover Statistics into product groups and to determine how much of these products are used by households. The Turnover Statistics measure total turnover in each sub-industry. Since the industries sell a large number of different goods and services, and household consumption is calculated and recorded for each good and service individually, the trend figures for the different industries have to be converted to trend figures for the various goods and services. This is done by a matrix where production (turnover) by trade activity (4digit NACE Rev.2) is split into those goods and services that are sold and how much of such is ascribed to household consumption. Information on products by industry is attained from the Retail Trade Survey. This is achieved through the retail trade survey (by products) conducted by INSTAT every five years, which provide detailed information to develop the connection through sales by type of goods (COICOP 4digit) and retail trade activity (4digit NACE Rev.2), group *45 - Wholesale and retail trade and repair of motor vehicles and motorcycles* and group *47 - Retail trade, except of motor vehicles and motorcycles*.

Since retail trade is what consumers buy most of their goods from retail outlets and, vice versa, retail outlets supply virtually all their goods to consumers, so is monetary transactions, some adjustment are done over annual total value of HFCE. The annual HFCE is separated to Self-consumption; Owner occupied dwellings and Agro-food market. Agro-food market is not covered by retail trade survey and this statistics are carried out by adjusted data taken from Agriculture sector, together with the part of consumption which goes for Self Consumption where the main groups are fruits and vegetables.

To find out which part is monetary transactions and goes to retail trade is deducted from annual total HFCE the part of Auto-consumption, Owner Occupied Households and what is estimated as Agro-food market sales. Only over the monetary transactions values is applying the transformation matrix COICOP 4digit – 4digit NACE Rev.2 for groups *Wholesale and retail trade and repair of motor vehicles and motorcycles* and *Retail trade, except of motor vehicles and motorcycles*. By this way is find out which COICOP groups are related with retail trade and later, retail trade indicators are benchmarked.

The other COICOP expenditure that are not linked with retail trade activity, group *45 - Wholesale and retail trade and repair of motor vehicles and motorcycles* and group *47 - Retail trade, except of motor vehicles and motorcycles,* some other quarterly indicators are used which are described below:

Imputed rent of owner occupiers is calculated on the basis of output from the production approach.

Consumption of natural water; water treatment and supply services are used quarterly turnover data from VAT file, this category in general its consumed from households so it’s more relevant.

Expenditure for Sewerage services; sewage sludge; waste collection and other related services are used turnover indicator.

Electricity consumption, this information is available on quarterly basis from distribution company (OSSH), is carried out from balance of energy, in which is a part of energy that goes only for household consumption (administrative data sources). This data are available at detail level in quarterly bases since 2007 year.

Transport services are separated in railway and road, air and sea; turnover data from production side are used as quarterly indicator in current prices. Te transport shares a small part in total consumption of households.

Related with *the consumption of post and communication services* very few information are available for consumption of household at quarterly bases. As quarterly indicator is used turnover from VAT file in current prices.

Expenditures on *hotel and restaurants* are estimated on the basis of the data on turnover from production approach, according by type of services and type of *accommodation services*.

Expenditures on *Education and health services*, is estimated in quarterly frequencies by using indicator of Output for education (public and private) and health (public and private).

For all *other services* that are not cover by all indicators mentioned above, due to the lack of data on output for certain personal services are used as indicator the total turnover data provided by enterprises.

The consumption of *residents abroad* and consumption of *non-residents* in the Republic of Albania is based on data from the Balance of Payments, which has been regularly compiled and published by the Bank of Albania.

All the indicators mentioned above are benchmarked with the respective annual value of COICOP or groups of COICOP to extrapolate the quarterly HFCE at current prices. After that is used annual structure to convert the quarterly HFCE at current prices into COICOP 4-digit level.

Constant prices are provided by deflating the quarterly HFCE at current prices, COICOP 4-digit level, with 4-digit, 3-digit or 2-digit CPI.

5.2 Government final consumption

Government final consumption expenditure is calculated according to the cost method. Main data sources are annual government fiscal indicator and quarterly accounting data indicators (provided by Ministry of finance every quarter). 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.

Estimates in constant prices of Compensation of Employees are obtained by average wage index classified by NACE activities which are characteristic for S.13 (three-digit NACE Rev.2). The structure used for the split between individual and collective estimates is based on NACE Rev.2 classification in Quarterly and Annual.

Consumption of fixed capital in Albania is estimated using PIM method. To estimate the PIM method the simplified IMF method was used covering the available information of CFC. Based on the existing level of detailed data provided was done the estimation of the PIM method by assets in a very detailed level giving the possibility to estimate GFCF for the years 2000-2014. For Quarterly respective ratio is used to divide the value of deprecation into all sectors assuming that the level of deprecation is the same as the level of wages and salaries made by an institution during period (the sector with the higher wages and salaries has the higher depreciation). The GFCF data was used as base for CFC alongside the estimation of the lifespan of assets and estimated price levels for a detailed level of assets type. The final estimation of CFC is based on the coordination of this information of the available years.

Intermediate consumption in current prices is calculated directly using the existing detailed data sources. Intermediate consumption in constant prices is calculated using CPI as a deflator.

For the estimation of the main aggregate of Output for the General Government detailed data from the Ministry of Finance are used. The information provided is detailed information of the individual accounting transaction of the budgetary units. To have this information closer to ESA2010 requirement for National Account three bridge tables were used.

The first bridge table the classification step. A structure of the all spending units is built. More than one spending units might be part of one single Institutional Units but this more detailed level of detail allows us to have even more quality in the estimation of the separate parameters. During this step the information on each spending unit are analyzed to estimate the institutional sector they

belong into. The sector classification and economic classification are made in the level of spending units. For some units that might represent some market output worth mentioning we used the 50% criteria to be more secure of the actual classification used. During analyzes of the budgetary units there were no cases of changes of classification due to the 50% criteria. The economic classification of the units is made into NACE Rev 1.1 and NACE Rev. 2.

The second bridge table Secondary Activities. Some institutions may have more than one main activity NACE code and for this reason the institutions are grouped in three institutional groups.

- only one activity
- two or more activities
- semi-budgetary units

The institution into the fist group follows only one activity and the future classification using NACE is from the data of NACE group. For example: “Mother Theresa" University Hospital Center has as its main activity health care (Section Q of NACE Rev 2.0). All the expenditure made by this institution is targeted at the improvement of the health care process. This institution doesn’t have any other second activity (not a relevant one) and its output is mainly non-market oriented. The general government institutions are good cases of this group, because they have only one main activity and they firmly stick to it.

The second group is made by institutions the main activities of which are different. All these institutions have a general government activity (NACE 84.11), but if we look into more detail at the expenditure, we can see that the kinds of activities are more than one. This section is comprised mainly of the local units that operate into more than one activity for the good of the everyday life. The activities range from water distribution to recreation activities. For this units we have build a new bridge table.

This bridge table is build up based on the COFOG classification. To estimate the pure branches of an economic activity the COFOG classification was transmuted into NACE Rev.2. For this classification the COFOG classification was transformed into ISIC and then was adapted to the Albanian classification of COFOG to pass to NACE Rev.2. (COFOG classification has the same structure in 3 digit level with the international classification but in a 6 digit level the data are arranged according to the Ministry of Finance Needs). This classification allows us to have a better classified estimation of secondary activity and to estimate the pure economic branches.

The third bridge table the Economic classification. For this classification the full set of economic accounts of the Ministry of Finance was analyzed and a bridge table was build in order to pass to ESA2010 requirements. For this classification information on the nature of the individual transaction were analyzed and classified according to ESA2010 classification. To have more

detailed information on ESA codes we used a seven digit level of accounts. This information help us identify a good level of adoption of ESA 2010 codes that is acceptable.

This information is used to separately estimate the elements of Value Added and to identify the marked and non-market output and to be able to estimate all the non-financial accounts of General Government.

Example of the Economic Clarification

Economic Accounts	Description	ESA2010 codes	GFCF classification
2312101	Spending in order to increase Fixed Capital - administrative building	P.5111	AN.1121
2312108	Spending in order to increase Fixed Capital- construction of ports	P.5111	AN.1122
2315120	Spending in order to increase Fixed Capital - Cars	P.5111	AN.1131
2314250	Spending in order to increase Fixed Capital - equipment for protection against fire	P.5111	AN.1139
6001001	Basic Salary	D.11K	
6010100	The social insurance contributions	D.121	
6011100	Contributions for health insurance	D.121	
6022001	Electricity	P.21	
6022002	Water	P.21	
6030004	Subsidies for the price difference for the urban bus transport	D.319	
6032001	Subsidies to cover losses for the water supply for irrigation	D.39	
7030100	VAT on goods and services within the country	D.211	
7030200	VAT on imported goods	D.211	
7031500	Imported fuel excise	D.2122C	
7111001	Income from kindergartens	P.131	
7111002	Income from nests	P.131	
7111007	Income from parking lot	P.111	

The Quarterly estimation of the General Government Output is based on the quarterly detailed information with the combination of the three bridge tables.

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. Since are not available any quarterly data, this expenditure components are not calculated according to the cost method.

Final consumption expenditure of non-profit institutions is estimated using "indirect method", by benchmarking turnover indicator, constructing from sales declaration of NPISH, with annual values. This component is only **0.2%** of GDP.

5.4 Gross capital formation

Due to the lack of availability of data sources in quarterly periodicity, the estimates of quarterly GFCF are carried out at a lower level in comparison with annual estimates. Being Albania mainly an importing country the main data sources used are data from foreign trade.

In Albania, the gross fixed capital formation (GFCF) consists mainly of two main components: machinery and equipment and construction.

1) **Gross fixed capital formation in machinery and equipment**

The quarterly disaggregation of annual data on gross fixed capital formation is mainly done by means of the commodity flow approach. The commodity flow approach gives the value of the resources (domestic production plus imports) potentially available for final and intermediate uses and attributes such value to the different uses through the destination shares of the internal and imported components detected by the expert opinion. Domestic production occupies a very small part; it is estimated by the index of industry turnover, while the indicator for imports is the value of quarterly imports of machinery and equipment. One of the key components of fixed capital formation is also means of transport; the value of this class comes from imports. In order to estimate GFCF for machinery and equipment and means of transport at purchasing prices a coefficient of the trade margins is applied to final results obtained based on commodity flow approach.

2) **Construction**

The quarterly gross fixed capital formation for construction is estimated following the same method used in annual. The quarterly indicator of construction is benchmarked with annual output. Then are applied some coefficients obtained from SUT sector related which secondary activity in construction and non-construction activity.

In order to obtain a good estimation of the gross fixed capital formation, during IPA 2011 one of the objectives set was to improve the component of GFCF. In order to have the same consistency with annual estimates and to have more detailed data it was proposed to add in the STS survey a specific question related with quarterly investments done by enterprises. This part of questionnaire provides data on investments by fixed assets, identifying separately tangible and non-tangible assets. The quality of data collected for the two first years was not very satisfactory but since it's the beginning and it's still a work in progress we will be able to see the reliability of these data in the future.

Quarterly estimates are done at current prices and then constant prices are derived by using respective price indexes according to the type of asset. Construction is deflated by quarterly construction cost index which is published by sector responsible for prices indexes in INSTAT. In the case of machinery and equipment it is used respective unit value index.

Changes in inventories

Due to the lack of data no quarterly estimations are done.

5.5 Imports, exports

The quarterly data on imports and exports is supplied by the Balance of Payments which is regularly compiled quarterly and published by Bank of Albania. The balance of payments represents a systematic overview of the value of economic transactions performed by the Albanian residents with foreign countries within a particular period. This is the main data source for the quarterly estimates of exports and imports of goods and services. All the adjustments are done by Bank of Albania to compile in accordance with the recommendations of the International Monetary Fund (Balance of Payments Manual).

For estimating export of goods and services in constant prices is used export price index which is available at detailed level since year 2007, meanwhile for import of goods and services in constant prices is used quarterly UVI index.

6 GDP components: the income approach

GDP components by income approach are not yet available.

7 Population and employment

7.1 Population

Figures on population are collected using both administrative and survey sources and are published by demographic statistics.

7.2 Employment: persons

In Albania the data for employment are collected using both administrative and survey sources. The collected data through administrative sources are released by INSTAT at quarterly frequency. These data cover public sector employment, non-agricultural private sector employment, and registered

unemployment. For the public sector employment, the information is collected by INSTAT according to the five-year-Official Statistical Programme. The administrative data on employment in the non-agricultural private sector and on registered unemployment are based on the information provided by the Ministry of Labor and Social Affairs. The employment in the private agricultural sector is based on the estimations obtained from household based surveys (until 2007 based on LSMS 2005 estimations and from 2007 onwards based on LFS estimations). Other administrative data related with employment come from the Tax Authority, enterprises declare and pay social contributions and social security for each employee they have. Big enterprises have monthly declarations and small enterprises have quarterly declarations.

The Labor force survey is the survey source of information used by INSTAT for the employment in Albania. It is a household based survey and data collection is done through face to face interviewing of all individuals aged 15 years and over in the sampled households. LFS is carried out at the national level, and covers all the territory of Albania. The LFS survey has been carried out on an annual basis for the years 2007-2011 and on quarterly basis since 2012.

In case that the approach used to estimate the persons employed according to the domestic concept is based on the integration of several sources of information from the household standpoint (Labor Force Survey, Population Census and Multipurpose Survey), a conceptual discrepancy may arise between data collected in the Labor Force survey and data estimated for the national accounts, so integration and transformation of the survey data according to concepts and definitions of ESA is needed.

7.3 Employment: total hours worked

Not available.

8 From GDP to net lending/borrowing

Transactions other than GDP are not yet available.

9 Flash estimates

Flash estimates are not yet compiled.

10 Main data sources used

The main data sources used for QNA in Albania are listed in the following table:

Nr	Name of the data source	Prod.[1]	Exp.[2]	Inc.
1	Value Added Tax declaration (VAT)	X	X	
2	Social contributions and Social insurance	X	X	
3	Short term survey (STS)	X	X	
4	External Trade	X	X	
5	Consumer Price Index	X	X	
6	Production Price Index	X	X	
7	Construction cost index (CCI)	X	X	
8	Unit Value Index (UVI)	X	X	
9	Producer Price Index for Export and Import	X	X	
10	Agriculture, Forestry and Fishery Statistical Declaration	X	X	
11	Expenditure and income of General Government	X	X	
12	Revenues and expenditures statement and Balance of Energy	X	X	
13	Profit and loss account of Bank of Albania	X	X	
14	Quarterly profit and loss account of commercial bank	X	X	
15	Quarterly questioner for FISIM	X	X	
16	Quarterly profit and loss account from non-banking monetary institutions	X	X	
17	Balance of Payments		X	
18	Declaration from Insurance companies	X	X	
19	Labor Force Survey (LFS)	X	X	

[1] The data source is used for the production approach to GDP.
[2] The data source is used for the expenditure approach to GDP.

Source 1: Value Added Tax declaration

One of the most important administrative sources for the compilation of Quarterly National Accounts is VAT file, details of which are important to the quarterly estimates. This file is provided by the General Directorate of Taxes (GDT) in quarterly intervals and annual version. From VAT file, data available are turnover and identification information in individual level of enterprises, NACE 4 digit classification.

Name of data source:	***Value Added Tax declaration***
Periodicity:	*Quarterly*
Time of availability of results:	*30 days after the end of the reference period*
Main variables used in QNA:	*- Turnover*
Further adjustments made to the survey data:	

Source 2: Social contributions and Social insurance

Administrative data on employment is available also from General Directorate of Taxation, where enterprises declare and pay social contributions and social insurance for every employee they have. Large enterprises have monthly declarations while small enterprises have quarterly declarations. These data are published in quarterly and annual periodicity.

Name of data source:	***Social contributions and Social insurance***
Organization collecting the data, and purposes for which it is collected:	*General Directorate of Taxation; Employment*
Periodicity:	*Quarterly*
Time of availability of results:	*Results are available 85 days after the end of reference period*
Main variables used in QNA:	*- Number of employees and salaries* *- Health and social contributions* *- Wages*
Further adjustments made to the survey	

Source 3: Short term survey (STS)

Short term survey of Enterprises represents one of the sources used for quarterly GDP estimates. Results from the surveys are used for output estimates, Gross Fixed Capital Formation, and the number of employees and average wages.

This survey covers some of the economic branches such as: Industry, Construction, Wholesales, Accommodation services, Transport and Telecommunication, Technology information Services, Architectural services and other civil engineering works. The collection of data is done through direct interview by surveyors; the selected units are obliged to complete the appropriate questionnaire.

The enumerators fulfill the questionnaires based on the individual declarations of enterprises. The questionnaire in paper has a separate model by each branch of economy, which the survey covers. The database of this survey is in individual level of enterprises. Each quarter, the sector of methodology performs the grossing up of the data.

Economic indicators are defined by the modular features in the coverage area. The main indicators are: turnover (excluding VAT), labor force indicators (total employees, paid employees, salaries, bonuses and training, the average number of employees and total hours), investments on intangible assets and fixed assets also change in inventories.

The first results are available about 75 days after the end of respective quarter. In 2013 the surveyed units sample consisted of about 5127 units and the exhaustive part about 2768 units.

Indices collected are updated and revised. The revision may occur for some reasons, added information, changes in methodology, correction of previous errors, or reevaluation of coefficients used for previous calculations. Data may be revised after a period after the publication for the first time of those indicators.

Retail trade survey is a quarterly survey, but the information is provided in monthly periods for the indicator of turnover, number of employees and wages.

Name of survey:	***Short term survey (STS)***
Periodicity:	*Quarterly*
Time of availability of results:	*75 days after the end of the reference*
Main variables used in QNA:	*- Implicit deflators used by the STS survey (2010=100)* *- Turnover (weighted values)* *- Production estimated from STS survey (weighted values)* *- Indicators of labor (employees in total, paid employment, wages, salaries and training, average number of employees and total working hours)*
Further adjustments made to the survey	

Source 4: External Trade

This source contains data on imports and exports from the General Directorate of Customs, which are based on the Combined Nomenclature classification. This data has a monthly frequency of collections. From these data is calculated the UVI index (Unit Value Index) which is used in QNA for purposes of deflation.

Name of data source:	***External Trade***
Periodicity:	*Monthly*
Time of availability of results:	*30 days after the end of the reference*
Main variables used in QNA:	*- Export and Import of goods*
Further adjustments made to the survey	

Source 5: Consumer Price Index

Consumer prices (costs of living) are measured based on a fixed consumer basket, which contains the most representative sample of goods and services in consumption of Population (the basket has 272 different goods and services). Basket indicators are aggregated into 12 major divisions of consumer products (CPA). Weights for the identification of the most representative items for consumption basket, which are used to calculate the consumer price indicators (cost of living), are based on the structure of household budget survey (HBS 2007). In December 2007 is done the grossing up of the consumer basket and the structure is changed by the new household budget survey held in 2014 and 2015.

Name of survey:	***Consumer Price Index***
Periodicity:	*Quarterly*
Time of availability of results:	*30 days after the end of the survey period*
Main variables used in QNA:	*- Consumer price indices -COICOP-six-digit*
Further adjustments made to the survey data:	

Source 6: Producer Price Index

Production price indices include only prices of industrial products. Prices of industrial products are obtained through quarterly surveys and the data availability is on monthly basis provided by the selected units (about 740), the representative of the total economy. Prices reported are those agreed between the supplier and the internal customer. From this indicator are excluded indicators of Value Added Tax (VAT), Excise, Transport costs to the customer and additional costs for transportation.

Name of survey:	***Producer Price Index***
Periodicity:	*Quarterly*
Time of availability of results:	*68 days after the end of the survey period*
Main variables used in QNA:	*- Production price indices-CPA-two-digit*
Further adjustments made to the survey	

Source 7: Construction cost index (CCI)

The Construction Cost Index measures the price development of the production factors raw materials, labor, machinery, transports, energy and other costs that are used in building projects. Indicators of Construction costs index are available quarterly since year 1993. The basket contains 73 items of which 68 are construction materials. The prices for construction materials collected from 126 distributors and retailers of construction materials. Machineries, transport and salaries collected in 50 biggest construction companies. Besides materials for construction within the country, are included other necessary costs of activities in the survey, and excluded the costs of terrain and VAT.

Name of survey:	***Construction Cost Index***
Periodicity:	*Quarterly*
Time of availability of results:	*65 days after the end of the survey period (construction work after 45 days)*
Main variables used in QNA:	*- Construction cost indices-CPA-two-digit*
Further adjustments made to the survey	

Source 8: Unit Value Index (UVI)

The index of imports UVI is an index built for internal purposes in INSTAT as the index of prices on products of imports and exports. The index is calculated by taking into account the data obtained in the detailed level of the external trade sector. The data are quarterly and in 8-digit level of the Combined nomenclature of products (CN).

Name of source:	***Unit Value Index***
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference period*

Main variables used in QNA:	*- Unit value index –CN-eight-digit*
Further adjustments made to the survey	

Source 9: Producer Price Index for Export and Import

Producer Price Index for export is estimated on a quarterly basis since year 2007, whose quality has been improving in recent years. Producer Price Index for Import is experimental for the moment in INSTAT. Very soon these indicators will be used as a substitute of UVI.

Name of source:	***Producer Price Index for Export and***
Periodicity:	*Quarterly*
Time of availability of results:	*68 days after the end of the reference period*
Main variables used in QNA:	*- Producer price index for export* *- Producer price index for import*
Further adjustments made to the survey	

Source 10: Agriculture, Forestry and Fishery Statistical Declaration

For quarterly estimates are used data from the Department of Agriculture, Forestry and Fishery Statistics which are available on a quarterly basis, t+60 days after the reference quarter. These data give an estimate only for volume indicator of production in annually basis (Annual Agricultural Survey) for agricultural and forestry products, and are adjusted in quarterly frequency based on cost method (expenses), as well as prices by items (Monthly survey of prices for Agricultural products), on a monthly basis.

Output evaluation of a year passes in the following phases :

1. First Forecast - is carried out in April, Ministry of Agriculture, Rural Development and Water Management (MARDWM) in current year on the basis of information collected by extension workers at the municipal level for detailed planted area for all crops and the five-year average yield for each crop.
2. Second Forecast - is carried out in October, MARDWM realized on the basis of information collected for the surface of the plant from which a survey is done in June and gather some indication as well as average yields.
3. Evaluation - Results of Survey collected from the Annual Agricultural Survey.

- **Annual Agricultural Survey**

This survey is conducted in December, and the sample is designed to be representative for the whole country. Final data from the annual survey are available in May of the following year. On the basis of this survey are made revisions of forecast estimation.

Name of data source:	***Annual Agricultural Survey***
Organization collecting the data, and purposes for which it is collected:	*Agriculture Statistics Directory, INSTAT; output of agriculture and forestry*
Periodicity:	*Annual*
Time of availability of results:	*60 days after the end of the reference*
Main variables used in QNA:	- *Output indicator for agriculture* - *Output indicator for livestock*
Further adjustments made to the survey	

Valuation of prices by items is based on a monthly survey of prices for agricultural products:

- **Monthly survey of prices for Agricultural products**

Monthly survey to collect producer price of agricultural products it is conducted in 12 districts (before in 26 districts). The data collected in green markets, farms bread milling, poultry, slaughter, clearly defined for each round according to the survey methodology. Price its collected to those traders wholesale/farmers who have sales quantity greater than 100 kg and deals only for domestic agricultural products. In cases where prices are collected in wholesale markets, the price collected is the price that these traders buy from farmers.

Name of data source:	***Monthly survey of prices for Agricultural products***
Organization collecting the data, and purposes for which it is collected:	*Agriculture Statistics Directory, INSTAT; prices for products*
Periodicity:	*Monthly*
Time of availability of results:	*60 days after the end of the reference*
Main variables used in QNA:	- *Price Indices of Agriculture* - *Price Indices of Livestock*
Further adjustments made to the survey	

Fishing data are collected from surveys conducted by the Directorate of fisheries, for occupancy and prices for fish and all aquatic categories which are: Marine, Coastal, Internal Waters, Laguna, aquaculture, Mollusks. Calculations in fishing output are measured by the amount of catch (production) of all kinds of fish and respective prices quarterly.

Name of data source:	***Fishery Sector***
Organization collecting the data, and purposes for which it is collected:	*Agriculture Statistics Directory, INSTAT*
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference*
Main variables used in QNA:	*- Fishing volume indicator* *- Price indicator*
Further adjustments made to the	

Source 11: Expenditure and income of General Government

The main source of the data used by national accounts is the structure of the expenditure and income by the Ministry of Finance (AMoFTS). This structure is available in monthly bases and the data are available in the official web site of MoF. The structure is mainly based on the government accounting system. Each transaction is detailed into a very detailed level from the institute to the purpose of this expenditure using NACE and COFOG classification.

Taxes on products: The most important taxes on products (VAT, excise duties and all import duties and taxes) are provided by direct data sources at cash value. VAT is collected by monthly reports provided by the Tax Administration and the data from Ministry of Finance for annual estimation. Data for import duties, taxes on imports and other taxes on product are provided based on customs statements, public finance revenues provided by Ministry of Finance and the Ministry of Finance makes an aggregation of the taxes from the above sources.

Subsidies: Subsidies are treated as separate codes of the Accounting System of the Government and we can easily extract that kind of data. Most of the subsidies are given to public corporations and therefore it could be easily allocated to a particular NACE category.

Name of data source:	***Expenditure and income of General Government***
Organization collecting the data, and purposes for which it is collected:	*Ministry of Finance; Calculation of indicators of public administration, education and*
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference*

Main variables used in QNA:	*- Indicators of public administration* *- Indicators of public-education* *- Indicators of public health* *- Average wage* *- Number of employees* *- Indicator of taxes on product*
Further adjustments made to the	

Source 12: Revenues and expenditures statement and Balance of Energy

The data for the energy is available in electronic format 60 days after the end of the reference quarter. The balance of energy is taken as a composed structure consisting of three main companies respectively Production Company, Distribution Company and Transmission Company. These indicators are available in quarterly level, indicator of volume of energy (kWh) and value (million ALL). Volume data and respective prices from balance sheet of Production Company. Statement of income and expenditure of Production Company and Distribution Company also balance sheet and statement of income and expenditure of energy by Transmission Company (kWh). In the available data we have also a important part which shows the energy consumed by the households.

Name of data source:	***Balance of Energy***
Organization collecting the data, and purposes for which it is collected:	*Production Company,* *Distribution Company,* *Transmission Company.*
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference*
Main variables used in QNA:	*- Volume and prices indicators* *- Statements of income and expense* *- Value indicators*
Further adjustments made to the	

Source 13: Profit and loss account of Bank of Albania

Selected data from Profit & Loss account by bank of Albania are in accordance with the chart of accounts for banks. They mostly included incomes (P.111), Wages and salaries and Employers' social contributions (D.11 and D.12), expenditures for goods and services (P.2), Economic appearance of assets (K.1).

Name of data source:	***Profit and loss account from Bank of***
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference quarter*

Main variables used in QNA:	*-income on fee and commissions* *-labor indicators (wages and salaries, social contributions)* *-revenues and expenses* *-depreciation*
Further adjustments made to the survey data:	

Source 14: Quarterly profit and loss account of commercial bank

This information is provided by the Bank of Albania. These data are in quarterly frequency, and contains data on 16 commercial banks operating in Albania. These data are used to estimate the market output and IC. Indicators used for estimates are as following: (for market output) incomes from commissions, other income of the activity; and (for IC) expenses for commissions, other operating expenses, and other administrative expenses.

Also from these data obtained information for: Compensation of employees, consumption of fix capital; other taxes on production.

Name of data source:	***Quarterly profit and loss account from commercial bank***
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference quarter*
Main variables used in QNA:	*-incomes from commissions* *-other income activity* *-expenses(commission, administrative,*
Further adjustments made to the survey data:	

Source 15: Quarterly questionnaire for FISIM

This questionnaire is fulfilled by bank of Albania in quarter frequency and contains information on for (i) Amount of the stock of loans in national and foreign currency for each institutional sector, (ii) Amount of the stock of deposits in national and foreign currency for each institutional sector, (iii) Accrued interest received from loans in national and foreign currency for each institutional sector, (iv) Accrued interest paid for deposits in national and foreign currency for each institutional sector and provided from the Bank of Albania, (v) Transactions between resident and non-resident financial intermediaries for the calculation of internal and external reference rate.

Name of data source:	***Quarterly questioner for FISIM estimates***
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference quarter*

Main variables used in QNA:	*-Amount of the stock of loans* *-Amount of the stock of deposits* *-Accrued interest received from loans* *-Accrued interest paid for deposits* *-Transactions between resident and*
Further adjustments made to the survey data:	

Source 16: Quarterly profit and loss account from non-banking monetary institutions

This account provide data by following activity: leasing companies, outsourcing companies, etc. These data provide information on 21 non-banking businesses. These data used to estimate Output and IC. Data source for calculation of market output: incomes from commissions, other income of the activity; and for IC: expenses for commissions, other operating expenses, other administrative expenses. Also from these data obtained information for: Compensation of employees, consumption of fixed capital, taxes on production, and other taxes on production.

Name of data source:	***Quarterly profit and loss account from non-banking institutions***
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference quarter*
Main variables used in QNA:	*-incomes from commissions* *-other income activity* *-expenses(commission, administrative,*
Further adjustments made to the survey data:	

Source 17: Balance of Payments

The balance of payments provides a systematic record of transactions with non-residents. The balance of payments data are used for compiling National Accounts in the external account of goods and services, the external account of primary incomes and current transfers, capital account and financial account. Balance of payments is used to calculate Net Exports, a component of the expenditure approach.

Name of data source:	***Balance of Payments***
Organization collecting the data, and purposes for which it is collected:	*Bank of Albania, external account of goods and services*
Periodicity:	*Quarterly*
Time of availability of results:	*60 days after the end of the reference*
Main variables used in QNA:	*- Current account* *- Capital account* *- Financial account components*
Further adjustments made to the	

Source 18: Declaration from Insurance companies

In Albania there are currently ten insurance companies which report periodically to the Albanian Financial Supervisory Authority. This source contains data on financial activity of insurance companies. These data exist in time series from the first quarter of 2006 and are downloaded from AFSA. The Financial Supervisory Authority provides data about: gross written premiums, gross claims paid, number of policies and number of paid claims.

Name of data source:	***Declaration from Insurance companies***
Organization collecting the data, and purposes for which it is collected:	*Albanian Financial Supervisory Authority; Insurance*
Periodicity:	*Monthly*
Time of availability of results:	*30 days after the end of the reference*
Main variables used in QNA:	*- Gross Written Premiums* *- Gross Paid Claims* *- Number of policies* *- Number of paid claims*
Further adjustments made to the	

Source 19: Labor Force Survey (LFS)

The main purpose of this survey is to obtain regular information about situation at the labor market. Is a family-based survey and data collection is done by interviewing individuals from age 15 to 64 years. LFS covers the entire territory of Albania. This survey is conducted annually for the years 2007-2011 and in quarterly level since year 2012. The data provide quarterly employment separately for agriculture, administration and non-agriculture sector.

Name of data source:	***Labor Force Survey (LFS)***
Organization collecting the data, and purposes for which it is collected:	*The Institute of Statistics (INSTAT), obtain regular information about situation at the*
Periodicity:	*Quarterly*
Time of availability of results:	*Results are available 85 days after the end of the survey period.*
Main variables used in QNA:	*- Employment* *- Unemployment*

Further adjustments made to the	