Blv. Zhan d'Ark , No. 3 Tirana, 1001 Tel: +355 4 2222 411 Faks: +355 4 2222 411 info@instat.gov.al www.instat.gov.al



# **Quarterly Economic Growth**

## First Quarter, 2014

**Tirana, July 7, 2014:** Gross Value Added (GVA) for the first quarter of 2014 reflects some fundamental changes as a result of revisions to annual data from 2008 to 2012 recently published and methodological improvements of quarterly accounts (see p.4, Information for users).

According to indicator of Gross Value Added (GVA) the economic activity in the first quarter of 2014 in volume terms has increased by 1.65 % compared with the first quarter of 2013. Contribution to this increase gave the main branches of the economy, such as Industry, Post and Telecommunication, Trade, Hotels and Restaurants and Other Services.

The main branches of the economy for the first quarter 2014 compared with first quarter 2013 appeared as follows:

Agriculture activity in the first quarter of 2014 compared with the same quarter of 2013 increased by 3.06 %.

The industry group activity increased by 8.24 % in the first quarter of 2014 compared with the first quarter of 2013, mostly influenced by the *Extracting Industry*, which increased by 41.62 % and *Manufacturing Industry* which decreased by 9.87 %.

Construction activity decreased by 5.3 % in the first quarter of 2014 compared with the respective quarter of 2013.

The group of Trade, Hotels and Restaurants increased by 2.66 % in the first quarter of 2014 compared with the same quarter of 2013. In this group, Trade increased by 5.52 %, while Hotels and Restaurants decreased about 14.64 %.

Transport activity in the first quarter of 2014 decreased by 24.98 % compared with the respective quarter of 2013.

Post and telecommunication activity increased by 3.64 % in the current reported quarter compared with the first quarter of 2013.

#### For release 07/07/2014

Other Services in the first quarter of 2014 increased by 1.97 % compared with first quarter of 2013. In this group, the public administration, education and health continue to be in upward trend together with some other services activities, such as other collective services, social, cultural services, etc. This positive impact was partially offset by the negative performance of the financial sector activities, real estate, rent and business support activities (legal activities, architecture, engineering and financial consulting, commercial, etc).

As for changes to the preceding quarter, the economy increased by 0.16 % compared with the fourth quarter of 2013.

Agricultural activity in the first quarter of 2014 compared with the previous quarter decreased by 0.36 %.

The industry group decreased by 7.7 % in the first quarter of 2014 compared with the fourth quarter of 2013.

Construction activity in the first quarter of 2014 decreased by 4.52 % compared with the fourth quarter of 2013.

The Group of Trade, Hotels and Restaurants decreased by 0.09 % in the first quarter of 2014 compared with the fourth quarter of 2013.

Transport activity in the first quarter of 2014 increased by 0.9 % compared with the previous quarter.

Post and telecommunication appeared to increase 0.36 % in the first quarter of 2014 compared with the fourth quarter of 2013.

Other services in the first quarter of 2014 increased by 0.29 % compared with the fourth quarter of 2013.





Fig.2 Changes to the fourth quarter of 2013 for the main branches of the economy



(Q1\_2014/Q4\_2013).

For more information, visit INSTAT website: http://www.instat.gov.al/

# **Information for users**

With the publication of the first quarter of 2014 GVA, INSTAT has revised all quarterly time series for Q1\_2008 - Q1\_2014 based on the latest annual estimates published on 30 May 2014 (http://www.instat.gov.al/media/246861/methodological\_explanations\_on\_annual\_gdp\_revisions.pdf), and merging the methodology of the quarterly estimates with the annual in order to maintain consistency of these indicators.

Also, INSTAT has done methodological improvements to quarterly national accounts within the recommendations of the IPA 2007, IPA 2011 and IMF technical assistance. These changes consist of:

- a. Financial sector, the estimation of financial activity in accordance with the concepts of the European System of Accounts (ESA 2010), as well as allocation of FISIM output to final or intermediate consumption of all institutional units of the economy.
- b. **Insurance activity**, for the first time measured separately from the Financial Activity, based on a quarterly indicator which estimates specifically the value added of insurance activity.
- c. Private Education and Health, for the first time in the Quarterly Accounts, the estimates are made for the activities of private education and private health with the production method using VAT declarations and statements of social insurance.
- d. **Industry**, for several branches of industrial activity, such as electricity and mining and quarrying of energy producing materials, the volume indicators are used in estimation to better reflect the real trend of value added indicator.

To better serve users, the INSTAT has extended the number of published time-series. Current price GVA data are published. Volume measures are now published in two forms – at previous year prices and in chain-linked form. The new chain-linked time series are presented with the reference year 2010 (2010=100). However, the users should be aware of the phenomena of non-additively of chained data (for more see page 6, Volume measure).

# Methodology

The current and constant measures of Quarterly GVA are consistent with the annual national accounts and are based on the same concepts and principles. The estimates in this publication are based on data available until June 2014. The main data sources that are used to estimate QGVA are in general administrative data and various infra-annual data collected by INSTAT's surveys. The series are subject to revisions in the future as additional or improved information becomes available.

The objective of the quarterly data in time series format is to give dynamic information about the economy. The publication includes estimates of quarterly GVA at constant prices (changes in volume of the quarterly GVA) where taxes and subsidies on products are not accounted for. The volume measures are expressed at average prices of the previous year and thereafter chain-linked with the reference year 2010 (2010=100). The estimates of quarterly GVA are compiled in both original and seasonally adjusted formats. The method used to estimate quarterly GVA is considered an indirect method, with the partial application of direct method for selected activities.

The indirect method implies that the quarterly value added is produced based on the 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 value added and output is constant within the period of estimation. In 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 value added as a difference.

#### Sequence of compilation

The main phases for the compilation process of QGVA using the indirect method are given below in a chronological order:

- i. Constructing the indicators from different sources for the appropriate recent periods;
- **ii.** Development of time series for quarterly data at current and constant prices in order to ensure data comparability and consistency over time;
- iii. Benchmarking the non-seasonally adjusted series to the relevant annual series;
- iv. Eliminating the seasonality from the aggregated quarterly time series.

It is worth mentioning that the sum of seasonally adjusted quarters is not necessarily equal to the annual total for any particular year. Under normal circumstances, there will be enough variation in seasonality and/or trading day effects to explain a gap between the two.

#### Volume measures

Quarterly National Accounts, to ensure better consistency with the Annual estimates, as well as taking into consideration the recommendations of experts of IPA2011 and IMF, changed the methodology of the volume measures which are expressed in average prices of the previous year and chain-linked reference 2010 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. 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) with subsequent conversion into previous year prices with the fixed base year.

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 GVA 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-additively of chained data.

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

Following international methodology, the real growth rate is estimated using quarterly chainlinked series, with the reference year 2010 (2010 = 100).

#### Benchmarking

The aim of benchmarking is to ensure the consistency between Quarterly and Annual National Accounts. It should be applied to both current and constant prices, where quarterly values are expressed at the same base year as the annual data. It has to be underlined that the benchmarking alters the

original figures, and consequently the volume growth of the aggregates, influencing in this way the chainlinked adjusted results.

Adjustment of quarterly GDP figures (from Q1 2008 to Q4 2012), according to the revised annual data for the period from 2008 to 2012, was 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.

#### Seasonal adjustment

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

### Indirect method:

The level at which series are 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 additive, but this applies only to the current price series. Although the indirect approach conceptually also provides additively for volume series.

#### 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 proper seasonal adjustment.

In a small country such as Albania, irregular events can have 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. INSTAT applied direct method for seasonal adjustment of quarterly time series.

### **Revisions policy**

One of the most important moments of the quarterly series is revisions policies. These revisions are related with quarterly and annual data changes. Revisions to the previously published series may be made each quarter. The frequency and cause of these revisions are as follows:

#### Quarterly revisions

As additional data become available for the last quarter, they have their impact on the previous quarters because: data reported for the last quarters are supported by additional source data or improvements/corrections to data for previous nearest quarters were performed. It is necessary to mention that most of the data used for quarterly estimations are administrative data.

Including the last quarter data in the series and subsequent application of the seasonal adjustment will result in some changes to the previous quarters.

### Annual revisions

Quarterly data are benchmarked to the annual one, 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 has three steps of estimation; flesh, semi final and final. Changes that happen during these steps have their direct effect on the quarterly series. The flash estimations of the current year are available 11 months after the end of the reported year, semi final are available with a time discordance of 17 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 are to the extent possible coinciding with the annual cycle of revisions outlined above.

In addition, each of the above causes of revisions, and/or the incorporation of 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.

#### Tab.1 Quarterly Gross Value Added, c u r r e n t prices

Non-Seas	onally A	djusted	1										Million Lek
NACE Rev1.1				Industry					Services			Gross Value Added at basic prices	
		Agriculture, hunting and forestry	Total	- Extracting	- Manufacturing	Construction	Total	Trade, Hotels and Restorants	Transport	Post and communication	Other Services		
			1	2=2a+2b	2a	2b	3	4=5+6+7+8	5	6	7	8	9=1+2+3+4
2013**			262.580	180.307	72.707	107.600	145.280	592.656	175.456	38.636	34.271	344.293	1.180.823
2013**													
	T1	Q1	64.603	45.603	17.232	28.371	28.113	136.941	37.296	8.631	7.767	83.247	275.260
	T2	Q2	84.917	48.975	18.397	30.578	39.782	143.910	42.390	10.134	7.745	83.641	317.584
	Т3	Q3	60.354	41.658	17.920	23.738	31.147	149.488	45.935	11.866	8.592	83.095	282.646
	T4	Q4	52.706	44.071	19.159	24.913	46.238	162.317	49.834	8.005	10.167	94.310	305.333
2014**													
	T1	Q1	64.682	41.585	18.901	22.683	26.669	139.259	38.412	6.580	7.801	86.467	272.195

2012\* Semi final 2013/2014\*\* Flash

#### Tab.2 . Quarterly Gross Value Added, chain-linked volume measures, reference 2010 year (2010=100)

Non-Sea	sonally	Adjust	ed										Million Lek
NACE Rev1.1		Agriculture.		Industry									
		hunting and forestry	Total	- Extracting	- Manufacturing	Construction	Total	Trade, Hotels and Restorants	Transport	Post and communication	Other Services	Gross Value Added at basic prices	
			1	2	2a	2b	3	4	5	6	7	8	9
2013**		247.616	174.960	50.327	121.975	142.607	573.068	166.692	36.812	34.134	335.386	1.138.712	
2013**													
	T1	Q1	57.207	38.949	9.751	29.552	27.714	132.361	35.409	8.233	7.664	81.086	256.439
	T2	Q2	82.141	47.233	12.614	34.534	39.038	139.245	40.078	9.626	7.645	81.862	307.639
	Т3	Q3	57.812	43.104	13.375	28.438	30.644	144.482	43.829	11.287	8.486	80.812	276.279
	T4	Q4	50.455	45.674	14.586	29.451	45.211	156.980	47.376	7.667	10.339	91.626	298.354
2014**													
	T1	Q1	58.956	42.159	13.810	26.635	26.244	133.056	36.352	6.177	7.943	82.687	260.667

New Conservative Addition

2012\* Semi final

2013/2014\*\* Flash

Tab.3 Quarterly Gross Value Added, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with corresponding quarter of previous year

Non-Sea	asonally	Adjust	ed										(%)
NACE Rev1.1			Agriculture,		Industry					Services			
		.1	hunting and forestry	Total	- Extracting	- Manufacturing	Construction	Total	Trade, Hotels and Restorants	Transport	Post and communication	Other Services	at basic prices
2013**			0,73	8,76	12,87	6,13	2,28	-0,55	-0,30	-12,33	-1,48	0,93	1,42
2013**													
	T1	Q1	-1,11	12,37	0,20	20,13	-1,50	1,42	0,19	-6,07	10,59	2,11	2,04
	T2	Q2	0,43	17,43	16,31	18,52	20,01	-2,06	-0,33	-7,88	-10,84	-1,27	3,64
	Т3	Q3	2,24	-2,99	3,47	-8,09	-10,99	-1,82	-4,07	-5,82	-10,08	0,93	-2,27
	T4	Q4	1,63	9,92	31,60	-2,66	1,96	0,38	3,12	-28,97	6,54	1,90	2,18
2014**													
	T1	Q1	3,06	8,24	41,62	-9,87	-5,30	0,53	2,66	-24,98	3,64	1,97	1,65
2012* Se	emi final												

2013/2014\*\* Flash

#### Tab 4. Quarterly Gross Value Added, chain-linked volume measures, reference 2010 year (2010=100)

Seasonall	y Adjuste	ed											Million Lek
NACE Rev1.1		Agriculture,	re. Industry						Services				
		hunting and forestry Total		otal - Extracting	- Manufacturing	Construction	Total	Trade, Hotels and Restorants	Transport	Post and communication	Other Services	Gross Value Added at basic prices	
			1	2	2a	2b	3	4	5	6	7	8	9
2013**			247.511	174.960	50.327	121.975	142.236	573.781	166.725	37.123	34.123	335.592	1.140.056
2013**													
	T1	Q1	60.813	38.949	11.043	29.552	35.735	144.046	41.598	10.027	8.739	83.576	283.876
	T2	Q2	61.737	47.233	12.289	34.534	38.375	142.873	41.605	9.884	8.211	83.140	285.353
	Т3	Q3	62.113	43.104	12.519	28.438	32.612	142.985	40.862	9.854	8.274	83.957	284.464
	T4	Q4	62.848	45.674	14.475	29.451	35.513	143.877	42.660	7.357	8.898	84.918	286.363
2014**													
	T1	Q1	62.623	42.159	15.102	26.635	33.909	144.009	42.622	7.423	8.930	85.166	286.814

2012\* Semi final

2013/2014\*\* Flash

#### Tab. 5 Quarterly Gross Value Added, chain-linked volume measures, reference 2010 year (2010=100), Real Growth Rates, comparison with previous quarter

Seasonally A	djusted												(%)	
		Agriculture,		Industry					Services					
NACE Rev1.1			hunting and forestry	Total	- Extracting	- Manufacturing	Construction	Total	Trade, Hotels and Restorants	Transport	Post and communication	Other Services	at basic prices	
2013**			0,85	8,76	12,87	6,13	1,70	-0,42	-0,27	-11,81	-1,28	0,97	1,32	
2013**														
	T1	Q1	-2,41	-6,26	0,64	-2,33	1,52	0,04	0,07	-2,57	2,97	-0,06	0,50	
	T2	Q2	1,52	21,27	11,29	16,86	7,39	-0,81	0,02	-1,43	-6,04	-0,52	0,52	
	Т3	Q3	0,61	-8,74	1,87	-17,65	-15,02	0,08	-1,79	-0,31	0,77	0,98	-0,31	
	T4	Q4	1,18	5,96	15,62	3,56	8,90	0,62	4,40	-25,34	7,53	1,14	0,67	
2014**														
	T1	Q1	-0,36	-7,70	4,33	-9,56	-4,52	0,09	-0,09	0,90	0,36	0,29	0,16	

2012\* Semi final

2013/2014\*\* Flash