

Supply – Use and Input – Output Tables

Year 2013

Tirana on October 14, 2016: INSTAT presents to users consolidated Supply and Use Tables (SUTs) and derived Input-Output Table (TIO) for the reference year 2013, according to the Nomenclature of the Economic Activities (NACE Rev.2) and the Nomenclature of Products by Activity (CPA 2008). The compilation of tables is based on methodology provided on Manual of Supply, Use and Input-Output Tables and harmonized with concepts and definitions of European System of Accounts (ESA 2010).

Supply and Use Tables

The supply and use tables offer the most detailed portrait of an economy and are an important instrument in analyzing and creating statistical models. Compilation and the balancing of these tables is done at detailed level A88 industries according to NACE Rev.2 and P88 products according to CPA 2008 and released at the aggregated level A35 activity-division and P35 product-division to be in line with other national accounts indicators.

The primary purpose of compiling the SUTs is building a sustainable system of national accounts, where SUTs provides a framework for controlling the consistency and completeness of data. These tables are very complex and require the integration of a large number of data sources and more detailed information at product level.

The supply and use tables provide the main macroeconomic aggregates such as GDP, value added, output by industry, import, final consumption, gross capital formation, export etc.

In table 1 is shown a summary of the 2013 supply and use table.

Tab. 1 Supply and Use table at current prices for year 2013, in ALL millions

Industries (NACE)	Agriculture	Industry	Services	Total output of products	Imports (CIF)	MTT*	Total Supply	Agriculture	Industry	Services	Total intermediate consumption of products	FD*	Total Use
Products (CPA)	1	2	3	4=1+2+3	5	6	7=4+5+6	8	9	10	11=8+9+10	12	13=10+12
Agriculture [1-3]	267,721		16	267,737	22,570	58,474	348,781	81,809	18,459	11,351	111,619	237,162	348,781
Industry [5-43]	100,524	818,435	3,471	922,430	399,203	372,080	1,693,713	20,531	461,386	197,757	679,674	1,014,039	1,693,713
Services [45-98]	1,292	43,949	1,010,871	1,056,113	212,176	- 258,199	1,010,090	3,056	71,199	203,033	277,288	732,802	1,010,090
Total	369,537	862,384	1,014,359	2,246,280	633,950	172,355	3,052,584	105,397	551,044	412,141	1,068,582	1,984,003	3,052,584
Value Added								264,140	311,340	602,218	1,177,698		

* Trade, transport margins and net taxes on products

** Final demand components

Supply Table

This table provides estimates of the supply of goods and services (products) by domestic industries as well as imports of goods and services. The supply of products is presented in the rows while the columns show the industry branches that produce these goods and services.

The values of the domestically produced products and import in the supply table are shown initially at basic prices while they are transformed to purchasers' prices in the final columns, where for each product are added the net taxes on products (taxes less subsidies on products), trade and transport margins. This transformation of supply from basic prices to purchasers' prices is done in order to have balanced supply and use at the same valuation system, at purchasers' prices.

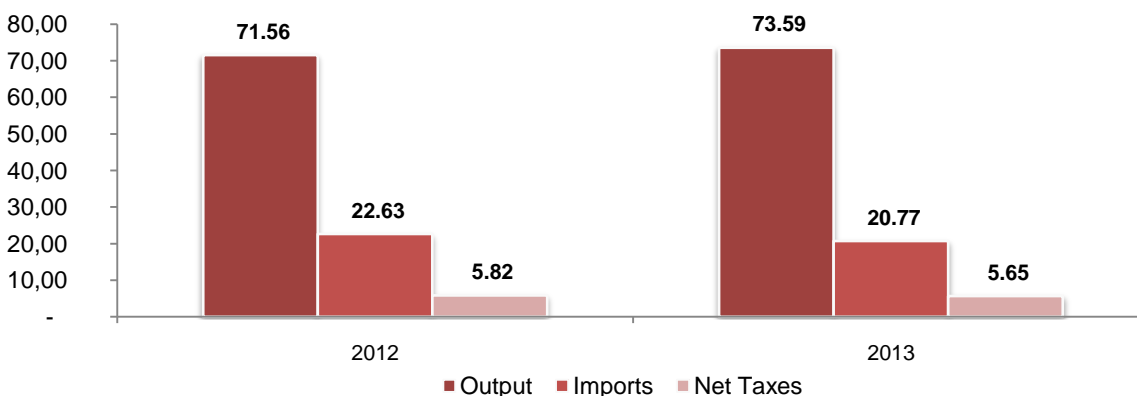
In table 2 is shown a summary of the 2013 supply table.

Tab. 2: Supply table, at basic prices including transformation into purchaser's prices, in ALL millions

Industries (NACE)	Agriculture	Industry	Services	Total output of products	Imports (CIF)	Trade and transport margins	Taxes less subsidies on products	Total supply at purchasers' prices
Products (CPA)	1	2	3	4=1+2+3	5	6	7	8=4+5+6+7
Agriculture [1-3]	267,721		16	267,737	22,570	52,193	6,281	348,781
Industry [5-43]	100,524	818,435	3,471	922,430	399,203	213,885	158,194	1,693,713
Services [45-98]	1,292	43,949	1,010,871	1,056,113	212,176	- 266,078	7,879	1,010,090
Total	369,537	862,384	1,014,359	2,246,280	633,950		172,355	3,052,584

During year 2013, the supply of disposable goods and services on the domestic territory and imported from foreign countries (Fig.1), represented the following structure: domestic production represents 73.59 % of total supply on domestic territory at purchasers' prices. The share of imports was 20.77 % while 5.65 % was the share of net taxes (taxes less subsidies on product). In 2013, total supply in current prices decreased by 0.32 % in nominal terms compared with year 2012, impacted by the decrease of imports by 8.51 % in nominal terms.

Fig. 1 Supply Structure, in %



As regard domestic production structure in products for reference year 2013 (Fig.2), goods contributed 52.98 % and services contributed 47.02 %.

The share of goods in imports for 2013 was 66.53 % and the share of imported services was 33.47%.

Fig. 2 Supply Structure by products, in %

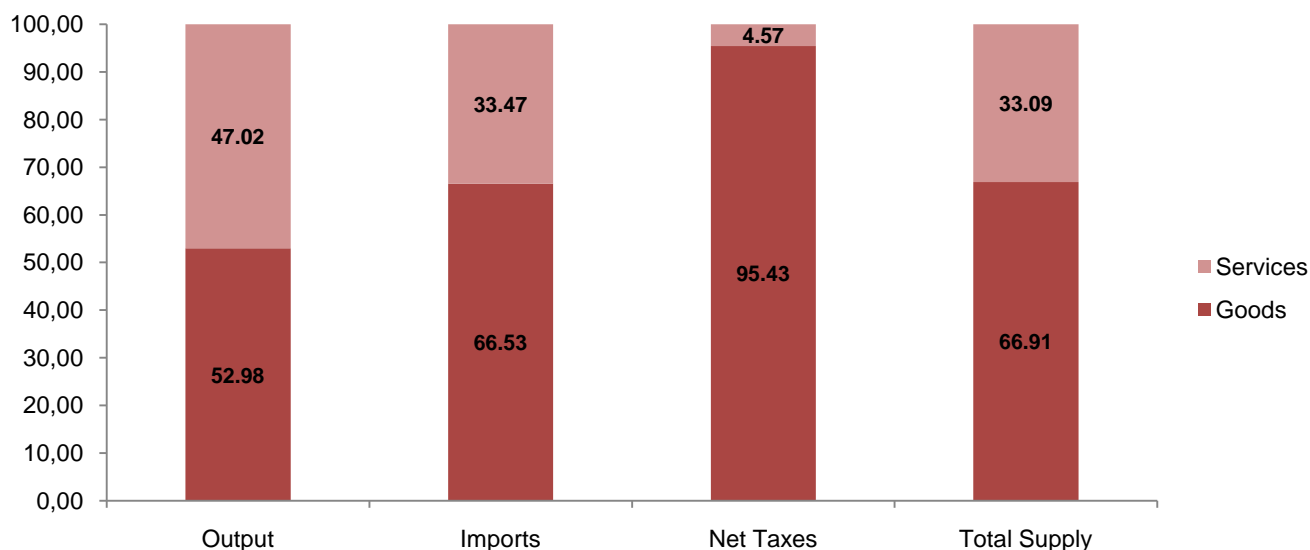


Table 3 shows total supply of product at basic prices for reference year 2013 where dependent on domestically produced or imported goods.

Tab. 3 Supply Structure according to origin, in millions and %

Products (CPA)	Domestic Output		Imports	
	mln	%	mln	%
Agriculture, forestry and fishing [1-3]	267,737	11.92	22,570	3.56
Industry [5-39]	560,924	24.97	398,795	62.91
Construction [41-43]	361,506	16.09	408	0.06
Trade; transport; accommodation and food services [45-56]	402,080	17.90	112,162	17.69
Information and communication [58-63]	107,774	4.80	25,107	3.96
Financial and insurance services [64-66]	53,956	2.40	5,634	0.89
Real estate services [68]	116,530	5.19		0.00
Professional, scientific, administrative and support services [69.1-82]	125,519	5.59	20,457	3.23
Public administration, education, human health [84-88]	197,220	8.78	18,938	2.99
Arts, entertainment and recreation services and other services [90-98]	53,033	2.36	29,878	4.71
Total Supply at basic prices	2,246,280	100.00	633,950	100.00

Related to structure of domestic production at basic prices for reference year 2013 aggregated at 10 CPA group-products, main share is represented by *Industry products* which accounted 24.97 % followed by *Trade, transport, accommodation and food services* with 17.90 % and *Construction* 16.09 %.

Imported goods in 2013 were predominantly also from *Industry products* with 62.91 % followed by *Trade, transport, accommodation and food services* by 17.69 %.

Use Table

Use table shows the use of products by domestic industry and by the final demand sectors, i.e. final consumption by households, public administration, and non-profit organizations serving households (NPISH), gross capital formation and export. The use table has two main objectives, firstly, it reveals by column the input structure of each industry and secondly, it describes in the rows the use of different products and services.

In table 4 is shown a summary of the 2013 use table.

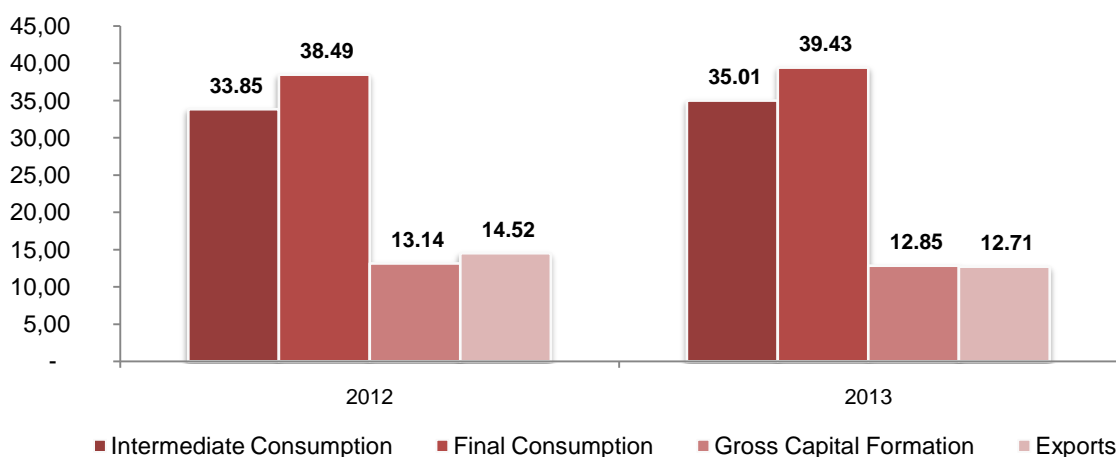
Tab. 4 Use table at purchasers' price, in million ALL

Industries (NACE)	Agriculture	Industry	Services	Total intermediate consumption of products	Exports (FOB)	Final consumption	Gross Capital Formation	Total use at purchasers' prices
Products (CPA)	1	2	3	4=1+2+3	5	6	7	8=4+5+6+7
Agriculture [1-3]	81.809	18.459	11.351	111.619	7.451	219.965	9.745	348.781
Industry [5-43]	20.531	461.386	197.757	679.674	163.245	480.913	369.880	1.693.713
Services [45-98]	3.056	71.199	203.033	277.288	217.278	502.861	12.664	1.010.090
Total intermediate consumption by industries	105.397	551.044	412.141	1.068.582	387.975	1.203.739	392.289	3.052.584
Value Added	264.140	311.340	602.218	1.177.698				

During year 2013, the use of disposable goods and services on the domestic territory and exported in foreign countries (Fig.3), represented the following structure: 35.01 % was used for intermediate consumption in production processes, 39.43 % for final consumption by households and government consumption, 12.85 % by gross fixed capital formation and 12, 71 % was exported.

As is shown in figure 3 year 2013 has not major changes in the structure of use of products at purchasers' prices compared with year 2012.

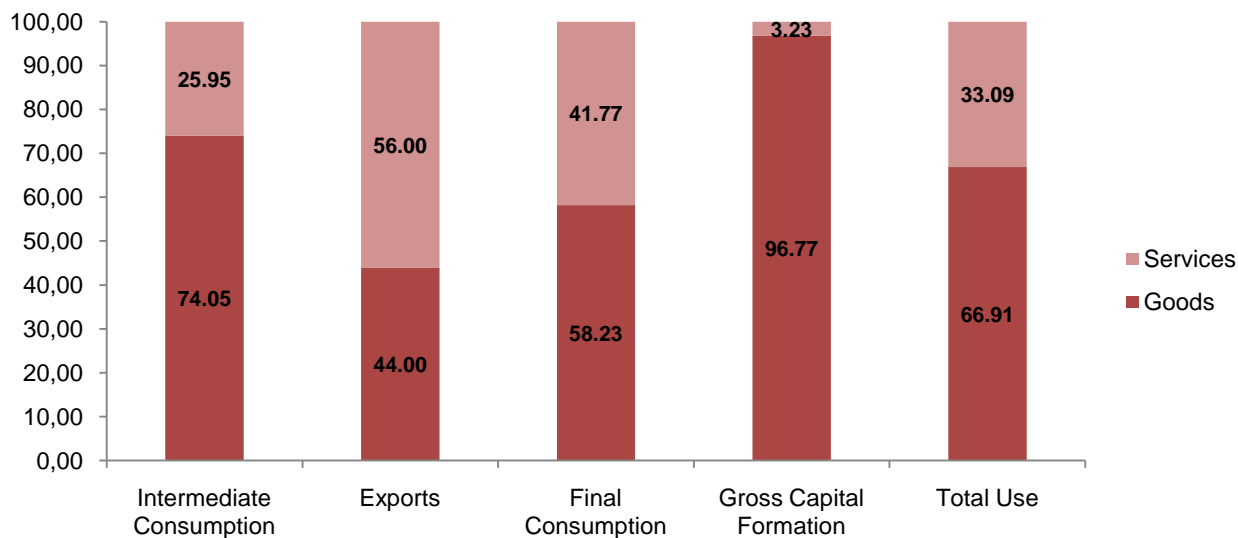
Fig. 3 Use Structure, in %



Regarding the structure of the products in the use table (Fig. 4), goods contributed 66.91 % of the total while services 33.09 %. Meanwhile the use of goods tops the entries of gross capital formation by 96.77 % and

intermediate consumption with 74.05 %, their weight decreasing comes to final consumption in 58.23 %, on the other hand in exports the services lead with 56.00 % against 44.00 % of the goods.

Fig. 4 Use Structure by products, in %



The following table (Tab.5) presented total uses at market prices for 2013 and their destination whether for domestic use or for export.

Tab. 5 Use Structure at purchasers' prices according to destination, in millions and %

Products (CPA)	Domestic Use		Exports	
	mln	%	mln	%
Agriculture, forestry and fishing [1-3]	341,330	12.81	7,451	1.92
Industry [5-39]	1,166,310	43.77	161,585	41.65
Construction [41-43]	364,157	13.67	1,660	0.43
Trade; transport; accommodation and food services [45-56]	141,434	5.31	104,893	27.04
Information and communication [58-63]	88,851	3.33	48,188	12.42
Financial and insurance services [64-66]	52,779	1.98	7,121	1.84
Real estate services [68]	116,611	4.38		0.00
Professional, scientific, administrative and support services [69.1-82]	120,366	4.52	26,741	6.89
Public administration, education, human health [84-88]	208,632	7.83	7,657	1.97
Arts, entertainment and recreation services and other services [90-98]	64,140	2.41	22,678	5.85
Total Uses at purchasers' prices	2,664,610	100.00	387,975	100.00

Related to structure of domestic use at purchasers' prices (*where included for intermediate consumption, final consumption by household and public administration, gross fixed capital formation and change in inventory*) for reference year 2013, aggregated at 10 CPA group-products, main share is represented by *Industry products* which accounted 43.77 % followed by *Construction* 13.67 % and *Agriculture products* 12.81 %.

Exported goods in 2013 were predominantly also from *Industry products* with 41.65 % followed by *Trade; transport; accommodation and food service activities* by 27.04 %.

Input - Output Table

Consolidated Supply and Use Tables are the base from where is derived Symmetric Input-Output Table (SIOT). The transformation of the supply and use tables to input-output table is based on the fixed products sales (each product has its own specific sales structure, irrespective of the industry where it is produced. The term "sales structure" indicates the proportions of the output of a product in which it is sold to the respective intermediate and final users) compiling the industry x industry table. Input-Output Table is a derivation of use table moving the secondary output up or down the column to the corresponding position of main output for that industry passing in homogeneous industries.

In table below is presented Input – Output table for the reference year 2013, at basic prices.

Tab. 6 Input-Output table at basic prices, in million ALL

Industries (NACE)	Agriculture	Industry	Services	Total intermediate consumption at basic prices	FD	Total Use at basic prices
Industries (NACE)	1	2	3	4=1+2+3	5	6
Agriculture [1-3]	71,248	20,056	17,743	109,047	326,827	435.873
Industry [5-43]	12,008	367,580	133,767	513,355	710,456	1.223.812
Services [45-99]	23,433	102,196	215,714	341,343	879,202	1.220.545
Total intermediate consumption by industries	106,688	489,831	367,225	963,745	1,916,485	2.880.230
Value added at basic prices	262,849	372,553	647,134	1,282,535		
Output at basic prices	369,537	862,384	1,014,359	2,246,280		
Imports (CIF)	66,336	361,427	206,186	633,950		
Supply at basic prices	435,873	1,223,812	1,220,545	2,880,230		

Information for users

Methodology and classification

Supply and Use Tables calculations are based methodologically on the basic concepts of the European System of Accounts (ESA 2010) and the System of National Accounts (SNA 2008) of the United Nations Organization (UN). SUT compilation requires a large number of data gathered in a highly detailed level. The Information sources used in this system are of the most varied and in many cases can also be secondary, but they can play an important role in balancing the flow of products. In addition, the methodology of preparation of SUT and TIO refer to the link:

<http://www.instat.gov.al/en/themes/national-accounts/publications/books/2015/supply,-use-and-input-output-tables-in-albania-2009-2011.aspx>

Classifications used in National Accounts are: - Nomenclature of economic activities (NACE Rev. 2). - Nomenclature of products (CPA); - Classification of Individual Consumption According to Purpose (COICOP); - Classification of the Functions of Government (COFOG).

Data sources

To calculate SUT it is used the information provided by various statistical and administrative sources. The data used can come from INSTAT's statistics producers or other various national institutions such as Ministries, Departments of the General Taxation and Customs, the National Registration Center, Bank of Albania, Financial Supervisory Authority, the National Agency of Natural Resources and others. By comparing these sources with each other, we are able to have a better view of the economy which is comprehensive, consistent, coherent and fully integrated.

Statistical sources include data obtained from records and surveys on various economic units or households, among which we may mention: the Register of Enterprises; Structure Survey; Retail Trade Survey; Household Budget Survey; Price Statistics Survey, Statistics agriculture and the environment, etc.

Administrative resources include administrative data collected by other institutions for various purposes, among which we may mention: the Annual Financial Statements; Value added tax (VAT); Balance of Payments; Public administration fiscal statistics; foreign trade statistics; The sales and purchases; etc.

Balancing process

The balancing of supply and use table is a very important process. After a detailed processing for each product, all the supply of a country must equal to uses. In many cases this is difficult to be reached since the first step of using data sources, for this reason the analysis are done at product level.

Before we look at product discrepancies, is analyzed the statistical discrepancies between two different approaches of GDP estimation. In the supply and use framework this discrepancies are eliminated and therefore is required to be achieved this macroeconomic balance.

In cases where the discrepancies between the supply and use are greater than 5%, is used an automatic balancing based on the distribution of the existing discrepancies ratios. When the discrepancies are between 5% and 10%, it can be relied on manual analysis and balancing of the discrepancies. If discrepancies are greater than 10% the situation requires adjustment of the primary data sources. It is necessary to check the data sources to better understand what has inflicted the discrepancies.

It may be necessary for a revaluation of different component of the supply or use table, which would lead to a circular cycle of evaluations. This cycle will be continuous until all the discrepancies arrive within acceptable intervals enabling a full consistency between different approaches of GDP estimation.

Definitions

The Supply and Use tables at current prices: SUT framework at current prices in Albania is evaluated at a level of 88 products and 88 industries corresponding to NACE rev 2 two digit level. Analyses were conducted according to CPA 2, 4 and 6-digit classification enabling a clear view of a commodity flow in the economy. To compile SUT in Albania are conducted a series of analyzes and studies in order to provide an efficient use of the statistical and administrative data sources. Special focus is put mainly level of detail of data to move to a greater breakdown potential.

Output: production is an activity carried out under the control, responsibility and management of an institutional unit that uses inputs of labor, capital and goods and services to produce outputs of goods and services. The total of products created during the accounting period is considered as output. There are three types of output such as: market output; output produced for own final use; non-market output.

Intermediate consumption: Intermediate consumption consists of goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services are either transformed or used up by the production services.

Taxes on products and imports: Taxes on products are paid taxes per unit of some goods and services like the Value Added Tax, excise and customs' tax on imports.

Subsidies on products: Subsidies on products are non-reverse payment made by public administration units to the companies in the form of a certain amount of money per unit of goods or services. Subsidies on imports

consist in subsidies of goods or services payable when the product surpasses the border of economic territory or if the services were made to resident institutional units.

Final consumption: Final consumption is one of the basic components of GDP by expenditure method. It consists in goods and services used by separate families or communities and are calculated as the sum of final consumption of household, final consumption of general government and final consumption of non - profit institutions serving the households.

Final consumption of households: Final consumption of households' contains all goods and services directly used to fulfill the individual needs of resident families.

Final consumption of General government and Non Profit Institutions Serving Households (NIPSH): Is the value of non - commercial services ensured by General government and non - profit institutions to the profit of communities or groups of families. It is calculated as the difference between the general government production and NPISH s and their market production value.

Net Export: Net export is the difference between export of goods and services (fob) and import of goods and services (fob).

Imports of goods and services: consist of the value of transactions in goods and services to residents with non-residents.

Gross fixed capital formation: Consists in expenses made to buy new capital or other specific expenses accomplished by resident producers in goods or services to maintain, increase or enlarge their productive activity or create new process conditions in the future.

Changes in inventories: Is defined as the difference between inventories of stocks in process and circulating assets by the end of the year and beginning of the other one. Inventories include raw material and others, products, works and services in process, not finished and finished goods, animals etc.

Trade Margins: The value of trade margins represents the output of wholesalers and retailers. European system of accounts (ESA 2010) defines trade margin is the difference between the actual or imputed sale price realized on a good purchased for resale, and the price that would have to be paid by the distributor to replace the good at the time it is sold or otherwise disposed of.

Transport margin: Transport margins include transportation costs paid separately by the purchaser and included in the use of products at purchasers' prices but not in the basic prices of a manufacturers' output or in the trade margins.

Basic prices: is the price receivable by the producer from the purchaser for a unit of a good or services produced as output, minus any tax payable and plus any subsidy receivable on product. It excludes any transport charges invoiced separately by the producer.

Market prices: is the price after adding taxes and deducting subsidies on products.

Current prices: Prices of reference period. They represent the price paid for goods and services during the time of production or consumption.