

# Supply, Use and Input – Output

# **Tables, 2020\***

**Tirana, 27 September 2023:** INSTAT presents consolidated Supply, Use (SUTs) for the reference year 2020. SUTs offer a detailed portrait of an economy. They are an important instrument in analysing and creating statistical models. These tables describe sources; uses of products and inter-industry relations in economy.

In the year 2020, total supply at purchasers' prices and total use in current price was estimated ALL 3,362,658 million, singing a decrease in nominal terms by 7 % compared to 2019.

Domestic production represents 75.8 % of total supply at purchasers' prices where goods represent 49.7 % and services 50.3 %. Imports represent 18.2 % of total supply where imported goods constitutes 75.6 % while services 24.4 %.

Intermediate consumption represents 32.8 % of total use at current prices where goods constitute with 73.5 % and services 26.5 %. Final demand represents 67.2 % of total use where the demand for goods represent 63.7 % and for services 36.3 %.

Tab. 1: The Supply, use table at current prices for year 2020, in ALL millions

Industries (NACE) Products	Industry	Services	Total output of products	Importe S (CIF)	MTT*	Total supply at purchaser	Industry	Services	Intermediat consumption ofproducts	Final Demand	Total use
(CPA)	1	2	3=1+2	4	5	s' prices 6=3+4+5	7	8	9=7+8	10	11=9+10
Industry [1-43]	1,241,744	25,339	1,267,083	462,781	519,548	2,249,412	562,455	248,541	810,996	1,438,415	2,249,412
Services [45-98]	48,547	1,231,878	1,280,425	149,601	(316,781)	1,113,246	79,740	212,181	291,921	821,325	1,113,246
Total	1,290,291	1,257,218	2,547,508	612,382	202,767	3,362,658	642,195	460,722	1,102,918	2,259,740	3,362,658
Value Added							648,095	796,495	1,444,591		

<sup>\*</sup> Trade. transport margins and net taxes on products

# **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 classification of each industry is based on whichever product accounts for the largest part of its output.

Tab. 2: Supply Table at basic prices including a transformation into purchasers' prices, in ALL millions

Industries (NACE)*	A	B-E	F	G-I	J	K L	. <b>M-N</b>	N 0-0	1	R-U	Total output of	Import s (CIF)	MTTT**	Total supply at	
Products (CPA)*	Output of industries (NACE). at basic prices										products	P7		purchase rs' prices	
A	340,163	-	62	-	-	-	-	-	-	-	340,385	24,587	81,091	446,063	
B-E	100,008	50,219	4,459	2,477	-	-	992	227	1,396	50,219	546,064	437,589	428,054	1,411,707	
F	-	361,617	2,080	10,441	-	-	226	-	2,979	361,617	380,634	604	10,403	391,641	
G-I	362	19,864	431,103	1,132	-	1,044	1,596	321	2,013	19,864	482,291	69,045	(327,042)	224,294	
J	-	392	54	100,822	-	-	181	68	2	392	101,768	15,458	4,414	121,639	
К	-	-	9	-	61,506	-	1,915	-	-	-	63,429	4,029	414	67,872	
L	-	1,071	212	-	-	119,315	161	-	-	1,071	120,846	-	260	121,105	
M-N	-	1,063	471	1,440	-	385	170,269	1,848	494	1,063	176,170	31,050	3,825	211,046	
O-Q	-	15	89	-	-	-	5,870	268,168	2,027	15	276,276	12,245	201	288,722	
R-U	-	187	505	2,108	-	-	1,679	291	54,779	187	59,645	17,776	1,148	78,569	
Output of industries	440,533	434,427	439,044	118,421	61,506	120,744	182,890	270,923	63,690	434,427	2,547,508	612,382	202,767	3,362,658	

<sup>\*</sup> The aggregation of industries and products according to the Nomenclature of the Economic Activities (NACE Rev. 2) and the Nomenclature of Products by Activity (CPA 2008)

Components of supply table for year 2020 compared to year 2019 appear as follows:

- Domestic production which shares an important part in supply table performed a decrease by 3.6 %;
- Imports goods and services decreased by 19.5 %;
- Net Taxes on products decreased by 4.8 %.

The structure of supply table at basic price, according to the origin (Fig.2) is as follow: domestic production represents 75.5 % of the total, while imports represent 18.2 %. The highest penetration of imports of goods and services is observed in Industry products by 44.5 %.

<sup>\*\*</sup> Trade. transport margins and net taxes on products

Fig. 1: Supply Structure, in %

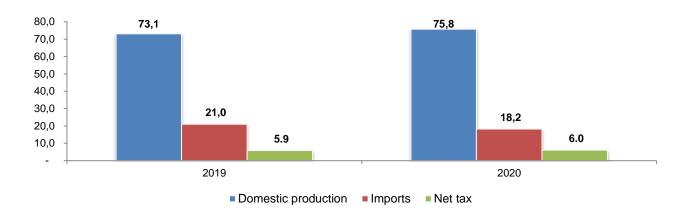
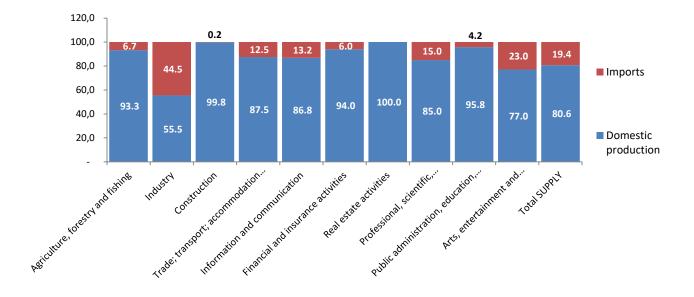


Fig. 2: Supply Structure at basic price, according to origin of products, in %



In 2020, the main share of domestic production structure at basic prices is represented by Industry Products which accounted for 21.4 % followed by Trade, transport, accommodation and food services with 18.9 % and Construction 14.9 %.

Imported goods in 2020 were also lead by Industry products taking up 71.5 % followed by Trade, transport, accommodation and food services with 11.3 %.

Tab. 3: Supply Structure at basic price by products and by origin

	Due divide his CDA	Domest	Imports		
	Products by CPA	mln	. %	mln	%
Α	Agriculture. forestry and fishing [1-3]	340,385	13.4	24,587	4.0
B-E	Industry [5-39]	546,064	21.4	437,589	71.5
F	Construction [41-43]	380,634	14.9	604	0.1
G-I	Trade; transport; accommodation and food services [45-56]	482,291	18.9	69,045	11.3
J	Information and communication [58-63]	101,768	4.0	15,458	2.5
K	Financial and insurance services [64-66]	63,429	2.5	4,029	0.7
L	Real estate services [68]	120,846	4.7	-	-
M-N	Professional. scientific. administrative and support services [69.1-82]	176,170	6.9	31,050	5.1
0-Q	Public administration. education. human health [84-88]	276,276	10.8	12,245	2.0
R-U	Arts. entertainment and recreation services and other services [90-98]	59,645	2.3	17,776	2.9
	Total Supply at basic prices	2,547,508	100	612,382	100

### **Use Table**

Use Table shows the usage 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. It has two main objectives; firstly it reveals the input structure of each industry in columns and secondly it describes the usage of different products and services in rows.

Components of use table for 2020 compared to 2019 appeared as follows:

- Final consumption which shares an important part in total economy appeared to decrease by -1.8 %;
- Intermediate consumption decreased by -5.2 %;
- Gross Fixed Capital Formation decreased by -2.4 %;
- Exports of goods and services decreased by -29.5 %.

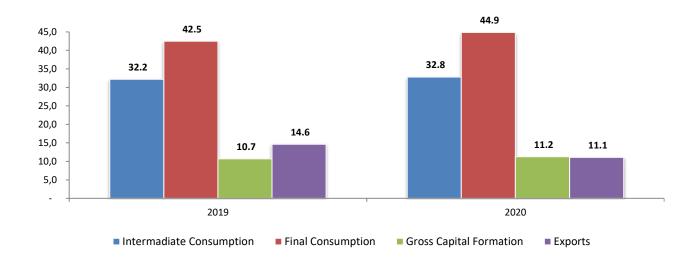
Tab. 4: Use table at purchasers' price in ALL million

Industries (NACE)	Α	В-Е	F	G-I	J	K	L	M-N	O-Q	R-U	IC* of products	FCE**	GFCF*	Export s (FOB)	Use at purchase rs' prices
Products (CPA)				In	put of indu	stries (NA	CE)					P3_S13- 14	P51-52	P6	
Α	85,133	11,363	1,073	8,497	61	12	118	481	296	109	107,143	325,557	(5,375)	18,738	446,063
B-E	35,280	177,966	184,806	84,657	36,664	2,991	2,335	38,543	37,326	8,166	608,732	581,563	85,595	135,817	1,411,707
F	352	6,948	59,536	5,135	2,437	3	8,257	4,832	6,999	622	95,121	3,450	292,485	586	391,641
G-I	1,610	9,965	3,616	26,074	4,987	1,575	139	7,121	5,916	3,129	64,131	89,174	-	70,988	224,294
J	9	4,614	857	2,807	13,064	4,886	343	4,373	5,155	2,453	38,561	44,040	5,175	33,863	121,639
К	286	7,252	4,631		852	4,933	8,956	1,113	2,260	3,433	47,156	16,724	-	3,992	67,872
L	57	3,409	1,247	3,133	1,041	1,584	91	2,882	403	1,179	15,026	106,079	-	-	121,105
M-N	1,084	8,868	31,306	24,762	9,218	10,594	750	17,377	2,419	5,905	112,283	13,619	42	85,101	211,046
0-Q	-	193	280	379	137	655	4	916	2,796	912	6,272	272,828	-	9,622	288,722
R-U	0	421	34	2,606	83	53	3	8	5,091	193	8,493	55,512	-	14,564	78,569
IC by industries	123,811	230,998	287,386	171,489	68,544	27,285	20,995	77,647	68,661	26,101	1,102,918	1,508,546	377,923	373,272	3,362,658
Value Added	316,722	184,332	147,041	267,555	49,877	34,220	99,749	105,243	202,262	37,589	1,444,591				

<sup>\*</sup> Intermediate consumption

In 2020, the use of disposable goods and services on the domestic territory and exports to foreign countries (Fig.3) represents the following structure: 32.8 % used for *Intermediate Consumption* in production processes, 44.9 % for *Final Consumption by Households and Government Consumption*, 11.2 % for *Gross Fixed Capital Formation* and 11.1 % for *Exports*.

Fig. 3: Use Structure, in %



<sup>\*\*</sup>Final consumption expenditure by households and government

<sup>\*\*\*</sup> Gross fixed capital formation and changes in inventories

In the Use Table (Fig. 4), *Goods* contributed 66.9 % of the total while *Services* 33.1 %. The use of goods has the main share on *gross capital formation* by 98.6 % and *intermediate consumption* by 73.5 %.

120,0 1.4 100,0 26.5 33.1 80,0 39.6 58.4 60,0 Services 98.6 ■ Goods 40,0 73.5 66.9 60.4 20,0 41.6 0,0 Final Consumption Total Use Intermadiate **Gross Capital Exports** Formation Consumption

Fig. 4: Use Structure by components, in %

In 2020 the domestic use at purchasers' prices structure (consisting of *Intermediate Consumption. Final Consumption by Household and Public Administration, Gross Fixed Capital Formation and Change In Inventory*), is represented by *Industry Products* which accounted for 42.7 % followed by *Agriculture Products* 14.3 % and *Construction* 13.1 %.

Exported Goods in 2020 consist mainly of *Industry Products* with 36.4 % followed by Professional. scientific. administrative and support services taking up 22.8 %.

Tab. 5: Use Structure at purchasers' prices according to destination

	Dradusta (CDA)	Domes	tic Use	Exports			
	Products (CPA)	mln	%	mln	%		
Α	Agriculture. forestry and fishing [1-3]	427,325	14.3	18,738	5.0		
B-E	Industry [5-39]	1,275,890	42.7	135,817	36.4		
F	Construction [41-43]	391,056	13.1	586	0.2		
G-I	Trade; transport; accommodation and food services [45-56]	153,305	5.1	70,988	19.0		
J	Information and communication [58-63]	87,776	2.9	33,863	9.1		
K	Financial and insurance services [64-66]	63,880	2.1	3,992	1.1		
L	Real estate services [68]	121,105	4.1	-	-		
M-N	Professional. scientific. administrative and support services [69.1-82]	125,944	4.2	85,101	22.8		
0-Q	Public administration. education. human health [84-88]	279,100	9.3	9,622	2.6		
R-U	Arts. entertainment and recreation services and other services [90-98]	64,005	2.1	14,564	3.9		
Total Us	es at purchasers' prices	3,086,192	2,989,386	100.0	373,272		

# Input - Output Table

Consolidated Supply and Use Tables is the base for deriving 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.

Input - Output Table (SIOT) 2020 is "Industry x Industry". This table is based on fixed product sales assumption. In table below is presented Input – Output table for the reference year 2020, at basic prices.

Tab.6: Input - Output Table, All million, 2020

Products (CPA 2008)	Agriculture products	Industry products	Services	Total intermediate consumption at basic prices	FC**	Total Use at basic prices
Products (CPA 2008)		2	3	4=1+2+3	5	6
Agriculture products	74,287	15,771	18,665	108,723	356,398	465,120
Industry products	20,800	316,057	158,841	495,698	792,253	1,287,951
Services	22,539	144,994	241,798	409,331	997,488	1,406,819
Total intermediate consumption at basic price	117,625	476,822	419,304	1,013,751	2,146,139	3,159,890
Value added at basic prices	316 722	331 373	796 495	1 444 591		
Output at basic prices	440.533	849.758	1 257.218	2.547.508		
Imports (CIF)	24,587	438,193	149,601	612,382		
Supply at basic prices	465,120	1,287,951	1,406,819	3,159,890		

<sup>\*\*</sup>Final Consumption



## 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. However, 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

http://www.instat.gov.al/media/333404/part\_d-sut\_compilation\_albania.pdf

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**

The information provided by various statistical and administrative sources is used to calculate SUT. The data used can come from INSTAT's statistics producer or other various national institutions such as Ministries, Departments of the General Taxation and Customs, National Registration Center, Central Bank of Albania, Financial Supervisory Authority, 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 for households among which we may mention: the Register of Enterprises; Structure Survey; Retail Trade Survey; Household Budget Survey; Price Statistics Survey; Agriculture and Environment Statistics, etc.

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

#### **Balancing process**

The balancing of supply and use table is a very important process. The supply must equal to uses after a detailed processing for each product.

Before we look at product discrepancies it is analyzed the statistical discrepancies between two different approaches of GDP estimation. In the supply and use framework these 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 % it is used an automatic balancing based on the distribution of the existing discrepancies ratios. The discrepancies between 5 % and 10 % are 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.