
On poverty and inflation statistics in Tunisia

Jamal Ouididi

Introduction:

**Population of Tunisia per governorate
for the year 2017:**

Governorates	Population
Tunis	1 069 663
Ariana	628 063
Ben Arous	677 775
Manouba	402 755
Total- Grand Tunis (Greater Tunis)	2 778 257
Nabeul	831 181
Zaghouan	184 258
Bizerte	585 452
	1 600 892
Béja	306 454
Jendouba	403 999
Kef	246 510
Siliana	226 998
	1 183 962
Sousse	715 744
Monastir	580 760
Mahdia	430 471
Sfax	994 271
Centre-East	2 721 245
Kairouan	585 860
Kasserine	452 001
Sidi Bouzid	445 478
Center-West	1 483 339
Gabès	391 143
Medenine	501 792

Tataouine	150 532
North West	1 043 467
Gafsa	347 225
Tozeur	112 327
Kebili	164 279
South West	623 831
Total	11 434 994

Demographic indicators:

Indicator	Unit	2012	2013	2014	2015	2016
Births	Per 1000 citizens	20.2	20.5	20.5	19.9	19.4
Deaths	Per 1000 citizens	5.9	5.7	5.7	5.9	5.5
Marriages	Per 1000 citizens	20.4	20.2	20.1	19.4	17.6
Population increase	Percentage	1.4	1.5	1.48	1.4	1.39
Birth indicator	Per female	2.4	2.4	2.42	2.3	2.31
Child mortality (%)	Per 1000 births	16.7	15.7	16.3	15.3	14.2

Source: National Institute of Statistics, Date: July 4, 2019

1-Line of poverty statistics:

Based on statistics released by the National Institute of Statistics for 2015 as the index reference period or the base year, it becomes clear that the number of the poor rose to

1,968,639, that is 15.2% of the total population (11.27 million in 2015) compared to 15.5% in 2010, 23.3% in 2005, and 32.4% in 2000. These statistics were released in a study entitled “Measuring poverty, inequality, and polarization between 2000 and 2010” conducted by the National Institute for Statistics in cooperation with the African Development Bank and the World Bank. In late 2011, the institute revised the concept of poverty based on an analysis of the family survey conducted in the years 2000, 2005, and 2010 and of another survey conducted between 2010 and 2011 on the budget, consumption, and the living standards of families.

The survey conducted in 2010 included a sample of 13,392 families chosen randomly. The committee that supervised the survey was comprised of Tunisian academics, government representatives, and civil society representatives. The survey modified the criteria according to which poverty is measured, hence underlining the development of poverty throughout the past decade. The survey revealed that members of a family in Tunisia would realize they are poor if their consumption goes below the poverty line identified at USD 1, 277 (1,277 Tunisian dinars) per year per person in big cities and USD 820 (820 Tunisian dinars) per year per person in rural areas. The percentage of extreme poverty

reached 4.6% in 2010, compared to 7.6% in 2005 and 12% in 2000. The survey estimated poverty line at 757 dinars per year per person in big cities and 571 dinars per year per person in rural areas. However, the National Institute for Statistics did not show that this drop in the percentage of poverty and extreme poverty does not apply to the Center West and the North West, in which poverty and extreme poverty rates rose remarkably higher than other regions during the decade covered by the survey. The rise in the gap from 49.9% in 2000 to 62.5% in 2010 confirms according to the survey that the feeling of marginalization by residents of disenfranchised regions intensified in the interval between 2000 and 2010. The survey also shows that families in which the head of household is unemployed or uneducated are more likely to become poor or extremely poor. According to the survey, modifications to the system through which poverty is measured are basically related to the welfare indicator and the identification of the line of poverty.

2-Expenditure data and poverty rates:

Table on expenditure and the percentages of poverty and extreme poverty for the year 2015:

Spending/ person (National, 2015) 3871	Spending/ person (Municipal, 2015) 4465	Spending/ person (non-municipal, 2015) 2585
Spending/ household (National, 2015) 15561	Spending/ house- hold (Municipal, 2015) 17365	Spending/ household (non-municipal, 2015) 11264
Poverty rate (National, 2015) 15.2%	Poverty rate (Mu- nicipal, 2015) 10.1%	Poverty rate (non-municipal, 2015) 26%
Extreme poverty rate (National, 2015) 2.9%	Extreme poverty rate (Municipal, 2015) 1.2%	Extreme poverty rate (non-municipal, 2015) 6.6%
The poor (2015) 1.693.968	The extremely poor (2015) 320.938	GINI coefficient (2015) 30.9%

Source: National Institute of Statistics

3-Inflation data:

The National Institute for Statistics periodically issues a family expenditure report depending on a reference year known as the base year. Starting January 2019, the institute started issuing the results of consumption expenditure using

2015 as a base year instead of 2010, which was the base year until the end of 2018. Also starting January 2019, the institute implemented methodological change on the occasion of changing the base year from 2010 to 2015.

3-1 Based on this, the institute documented a rise in prices upon consumption by 0.8% in January 2019, compared to the month before.

**Table (1): Main changes in prices
of foods and beverages:**

Main products	Monthly changes	Annual changes
Fresh vegetables	7.1%	5.6%
Poultry	7.2%	9.2%
Eggs	4.5%	33.8%
Lamb	3.4%	17.0%
Cheese and dairy products	2.8%	11.8%
Beef	1.8%	15.7%
Sweets & chocolates	1.1%	11.9%
Spices	0.9%	6.3%
Dried fruits	1.0%	17.1%
Cereals	0.9%	8.4%

Main products	Monthly changes	Annual changes
Mineral water & fizzy drinks	0.7%	6.4%
Legumes	0.5%	8.1%
Food oils	-0.2%	-1.2%
Coffee	0.0%	0.0%
Fresh fruits	-0.9%	-0.2%
Fresh fish	-0.4%	2.9%

3-2 In December 2018, the percentage of the rise in the family consumption expenditure indicator was estimated at 0.5%. The institute attributes this rise to an increase in the prices of food and beverages by 2.2%, including fresh vegetables, poultry, eggs, and meat, as shown in the above table. Furniture and household items and services increased by 0.9%, which was particularly felt in cleaning supplies that increased by 1.2%, construction material by 0.7%, and electrical appliances by 0.6%. Healthcare items and services by 0.7%, mainly demonstrated through drug prices (1.1%) and medical services in the private sector (0.6%).

3-3 The National Institute for Statistics recorded a 7.1% decline in the inflation rate in family consumption expenditure for January 2019, compared with 7.5% in December 2018.

Household consumer index rate						
Year 2015						
Final results for January 2019 (Source: National Institute for Statistics)						
Groups	%	Jan. 2019		Jan. 2018		1-month rate
		Dec. 2018	Jan. 2019	Dec. 2018	Jan. 2018	2018/2019
Food & beverages	26.2	2.2	2.2	2.2	7.1	7.1
Tobacco & alcoholic beverages	2.8	0.0	0.0	0.0	0.3	0,3
Clothing & footwear	7.4	0.3	0.3	0.3	9.4	9.4
Housing & energy	19.0	0.3	0.3	0.3	5.2	5.2
Furniture & appliances	5.9	0.9	0.9	0.9	0.9	0.9
Healthcare	5.8	0.7	0.7	0.7	4.6	4.6
Transportation	12.7	0.0	0.0	0.0	10,2	10.2
Telecommunications	4.6	0.0	0.0	0.0	0.1	0.1

Culture& entertainment	2.1	0.6	0.6	0.6	6.2	6,2
Education	3.2	0.0	0.0	0.0	7.3	7.3
Hotels& restaurants	4.6	0.5	0.5	0.5	8.6	8.6
Other goods & services	5.6	0.9	0.9	0.9	10.9	10.9
General indicator	100	0.8	0.8	0.8	7.1	7.1

Total minus energy	92.5	0.9	0.9	7.1	7.1
Total minus energy & food	66.3	0.4	0.4	7.1	7.1
Total minus clothing	92.6	0.9	0.9	6.9	6.9
Total minus tobacco & alcoholic beverages	97.2	0.8	0.8	7.3	7.3
Results for past years					
Jan. 2018		1.2	1.2	6.6	6.6
Jan. 2017		0.7	0.7	4.7	4.7
Results for months of year 2019					
Month		Monthly change	Change by December	Annual slope	Change in accumulation of months
January		7,1	7,1	0,8	0,8

According to the institute, this decline in the inflation rate is attributed to a drop in the impact on increases recorded in January 2018, when the new 2018 Finance Law was put into effect and led to an increase in the value-added tax (VAT) from 18% to 19%, 12% to 13%, and 6% to 7%, that is a 1% rise in each of the installments applied throughout the country. It is noteworthy that the National Institute for Statistics started its analysis through comparing the inflation rate in January 2019 with that of December 2018 then went back to January 2018 in an attempt to explain the drop in inflation rate in January 2019 through assuming that 2018 saw the start of the implementation of VAT increases whereas 2019 did not see any similar increase. The institute did not also mention the impact of remarkable increases in energy prices (electricity and natural gas) authorized by the government in mid-2018. This increase reached 13% for domestic consumption and 46% for corporate consumption, which led to an increase in the prices of the products of energy-intensive industries such construction material, healthcare items, and food.

3-4 Prices of food rose rapidly in January 2019 from 0.6% in the previous month to 7.1% throughout the year. Prices of meat increased by 13.3%, dairy products and eggs by 11.8%, vegetables by 6.3%, fish by 4.6%, and processed food products by 5.5%.

3-5 Prices of transportation increased by 10.2% compared to January 2018. The institute attributed that to the increase in car prices by 11.4%, car expenses such as spare parts and fuel by 10%, and transportation services by 8.8%.

3-6 According to the institute, the implicit inflation rate for January 2019, that is minus energy and food, was estimated at 7.1%, compared to 7.9% in December 2018. The institute also stated that that the prices of unpriced goods rose by 8.3%, compared to 5.1% for priced goods, taking into consideration that the annual sliding scale for unpriced foodstuffs reached 6.8%, compared to 2.3% for priced foodstuffs.

4-Methodological modifications for base year 2015:

Upon introducing those modifications, detailed in the table below, the National Institute for Statistics stated that the consumer price index is one of the most important economic indicators since it is basically used for determining the adequate economic, financial, and social policies as well as a reference in wage adjustments. The institute also noted that the consumer price index is measured through tracing the development of the cost of a particular package, or a market basket, of goods and services with fixed specifications and quality purchased by Tunisian households. It is

noteworthy that the consumer price index in Tunisia was reviewed eight times since independence in 1956. After shifting to 2015 as the base year, the weighted average of each item in the expenditure list was identified and so was geographical coverage as of that year.

4-1 Weighted average:

The National Institute for Statistics confirmed that weighted averages are determined through the national survey, conducted every five years, of household expenditure and consumption for 2015. According to the institute, the weighted average of food and beverages dropped from 28.1% to 26.2%. On the other hand, the weighted average of housing and utilities rose from 17% to 19%, which was particularly demonstrated in the rise of the weighted average of rent from 10% to 12%. Table (2) shows the weighted averages of base years 2010 and 2015.

Table (2): weighted averages for bases years 2010 and 2015:

Categories	Base year 2015	Base 2010
Food & beverages	26.2%	28.1%
Tobacco & alcoholic beverages	2.8%	2.9%
Clothing & footwear	7.4%	8.4%
Housing & utilities	19.0%	17.0%
Furniture & electric appliances	5.9%	6.8%

Categories	Base year 2015	Base 2010
Healthcare	5.8%	5.6%
Transportation	12.7%	12.1%
Telecommunications	4.6%	5.6%
Culture & entertainment	2.1%	2.0%
Education	3.2%	2.4%
Restaurants & hotels	4.6%	4.3%
Other goods & services	5.6%	4.9%
Total	100%	100%

4-2 Market basket of consumer goods and services:

The National Institute for Statistics announced that the market basket of consumer goods and services was revised through adding new items and authorizing the addition of more. However, the institute did not provide a list of the items added compared to 2010. This lack of transparency puts the credibility of the review process into question.

Table (3): Number of products and services in the market basket of base year 2015:

Categories	Number of products	Number of Varieties
Food & beverages	165	1458
Alcoholic beverages & tobacco	13	89
Clothing & footwear	116	1041
Housing & utilities	27	216
Furniture & appliances	149	765

Categories	Number of products	Number of Varieties
Healthcare	27	309
Transportation	56	297
Telecommunications	11	69
Culture & entertainment	62	294
Education	5	129
Restaurants & hotels	26	156
Other goods & services	63	351
Total	720	5174

4-3 Sales outlets:

As part of its plan to expand geographical coverage, the National Institute for Statistics announced adding sale outlets to the indicator used to measure poverty. The addition of new items to the market basket also necessitated the addition of more outlets. According to the institute, sale outlets increased from 3,452 in 2010 to 4,280 in 2015, distributed based on table (4) below, also issued by the institute.

Table (4): Sample of sale outlets numbers for base years 2010 and 2015:

Type of sales outlets	Base year 2015	Base year 2010
Large stores	178	125
Municipal markets	85	88
Stores, bakeries, & cafés	195	205
Clothing stores	393	382

Type of sales outlets	Base year 2015	Base year 2010
Specialized stores (furniture, electric appliances, spare parts, construction material... etc.)	392	373
Service stores (public & private)	1695	1485
Other stores	1122	992
Weekly markets	22	22
Total	4082	3672

The table above demonstrates that outlets added in base year 2015 are 410, compared to 2010. However, the institute did not provide an account of the geographical distribution of those outlets whether across the country or in neighborhoods in big and medium cities.

Below are additional tables:

Household consumer price index
Base year: 2015
Monthly changes: January/ December
Source: National Institute of Statistics

Categories & sub-categories	2016	2017	2018	2019
Food & beverages	0.1	1.4	1.1	2.2
Foodstuffs	0.1	1.5	1.0	2.3
Bread & grains	0.1	0.5	1.4	0.4
Meat	-0.8	-0.6	0.8	4.4
Fish	0.8	1.6	1.2	-0.3
Milk, dairy products & eggs	0.0	0.5	2.1	2.8
Cooking oil	0.8	2.1	0.7	-0.1
Fruits& dried fruits	4.2	-2.9	3.5	-0.6
Vegetables	-1.6	7.9	-1.4	4.9
Sugar, sweets, chocolate... etc.	0.1	0.7	2.0	0.5
Beverages	1.1	0.5	1.8	0.6
Coffee & tea	0.1	0.0	3.3	0.4
Mineral water, fizzy drinks, juice	1.5	0.7	1.2	0.7
Alcoholic beverages & tobacco	0.1	0.0	0.2	0.0
Alcoholic beverages	1.8	0.0	3.3	0.6
Tobacco & cigarettes	0.0	0.0	0.0	0.0
Clothing & footwear	0.9	0.4	-0.3	0.3
Clothing basics	0.6	0.3	-0.3	0.5
Fabrics	1.0	0.4	-0.1	0.9
Clothes	0.6	0.3	-0.3	0.4
Accessories	0.4	0.4	0.0	0.7
Footwear	1.7	0.5	-0.4	-0.1
Housing & utilities	0.4	1.5	0.7	0.3

Categories & sub-categories	2016	2017	2018	2019
Rent	0.6	1.4	0.5	0.4
Maintenance	0.0	0.3	4.0	0.6
Potable water	0.3	0.0	0.0	0.0
Electricity, gas & fuel	0.0	2.9	0.6	0.0
Furniture & household supplies	0.3	0.2	1.3	0.9
Furniture	0.2	0.3	1.5	0.7
Curtains& linen	0.3	0.6	0.2	0.7
Electrical appliances	0.2	0.2	1.1	0.6
Kitchen utensils	0.4	0.1	0.8	0.6
Cleaning tools & supplies	0.3	0.3	1.4	0.8
Material & services for maintenance	0.3	0.2	1.6	1.5
Healthcare	0.3	0.0	1.1	0.7
Pharmaceuticals	0.2	0.0	1.1	1.1
Medical care	0.7	0.0	1.6	0.6
Hospital care	0.0	0.0	0.0	0.0
Transportation	0.0	0.0	2.7	0.0
Cars	0.0	0.1	4.0	0.1
Car expenses	-1.0	0.1	3.0	0.2
Public & private transportation services	1.6	-0.2	0.4	-0.6
Telecommunications	0.0	0.1	0.9	0.0
Post service	0.0	33.8	0.0	0.0
Telecommunication devices	-0.3	-0.1	1.3	-0.2
Telecommunication services	0.0	0.0	0.9	0.0
Culture & entertainment	0.2	-0.3	2.1	0.6
Audio, visual & media devices	-0.1	-0.3	3.5	0.4
Other entertainment devices	-0.4	-0.1	1.6	0.7

Categories & sub-categories	2016	2017	2018	2019
Cultural & entertainment activities	0.2	0.4	0.7	0.2
Cultural & entertainment services	0.6	-0.9	0.2	0.1
Newspapers, magazines & books	0.4	0.1	3.1	3.3
Education	0.5	0.1	0.9	0.0
Elementary & preparatory education	0.0	0.0	0.2	0.0
High school education	0.0	0.0	0.4	0.0
Stationary	1.7	0.0	0.9	0.1
Textbooks	0.0	0.0	0.0	0.0
Private tutoring	0.9	0.3	2.0	0.0
Hotels & restaurants	0.1	0.2	1.3	0.5
Restaurants & coffee houses	0.2	0.2	1.4	0.9
Hotels	-0.7	0.7	0.3	-2.8
Other items & services	1.1	0.3	2.3	0.9
Personal care	0.1	0.4	2.6	1.2
Personal items	0.5	0.3	1.0	0.6
Insurance	6.7	0.0	1.8	0.0
Financial services	0.0	0.0	0.0	0.0
Total	0.3	0.7	1.2	0.8

Household consumer price index

Base year: 2015

Annual sliding scale: January/ January

Categories & sub-categories	2016	2017	2018	2019	Weighted average
Food & beverages	1.4	4.9	7.5	7.1	26.2%
Foodstuffs	1.1	5.0	7.7	7.2	24.3%
Bread & grains	1.7	1.8	4.0	4.3	3.8%
Meat	-3.1	-0.9	10.5	13.3	5.5%
Fish	3.9	9.0	7.5	4.6	1.0%
Milk, dairy products & eggs	0.6	1.1	4.6	11.8	4.0%
Cooking oil	6.1	10.2	16.6	-0.2	2.0%
Fruits& dried fruits	4.9	4.5	16.0	1.8	2.3%
Vegetables	0.3	17.0	2.0	6.3	4.2%
Sugar, sweets, chocolate... etc.	3.3	2.7	5.1	6.1	0.8%
Beverages	5.8	4.4	5.3	6.6	2.0%
Coffee & tea	5.5	0.3	6.7	7.0	0.6%
Mineral water, fizzy drinks, juice	6.0	6.2	4.7	6.4	1.4%
Alcoholic beverages & tobacco	0.7	-0.9	12.5	0.3	2.8%
Alcoholic beverages	9.0	-10.9	5.9	4.7	0.2%
Tobacco & cigarettes	0.0	0.0	13.1	0.0	2.6%
Clothing & footwear	7.5	6.7	5.9	9.4	7.4%
Clothing basics	7.5	6.5	6.7	9.2	5.2%
Fabrics	4.0	2.5	4.9	9.6	0.2%
Clothes	7.2	6.7	6.9	9.2	4.6%

Categories & sub-categories	2016	2017	2018	2019	Weighted average
Accessories	13.2	6.9	6.2	9.6	0.2%
Footwear	7.4	7.2	4.2	9.8	2.2%
Housing & utilities	4.9	6.2	3.9	5.2	19.0%
Rent	7.1	6.6	4.1	4.7	12.1%
Maintenance	2.3	2.2	14.6	11.3	1.5%
Potable water	3.2	15.8	0.0	3.9	1.5%
Electricity, gas & fuel	0.1	2.9	0.7	5.0	4.0%
Furniture & household supplies	5.4	4.0	6.8	9.0	5.9%
Furniture	6.8	3.6	5.9	7.9	1.2%
Curtains& linen	6.3	7.1	6.1	9.3	0.4%
Electrical appliances	4.1	3.3	6.1	8.2	1.8%
Kitchen utensils	6.3	6.0	7.4	9.6	0.4%
Cleaning tools & supplies	5.2	4.4	11.3	9.5	0.3%
Material & services for maintenance	5.4	3.9	7.4	10.1	2.0%
Healthcare	2.9	2.4	5.1	4.6	5.8%
Pharmaceuticals	2.3	1.8	4.1	5.3	2.8%
Medical care	5.1	4.4	8.8	5.5	2.0%
Hospital care	0.0	0.0	0.0	0.0	0.9%
Transportation	1.4	4.6	8.8	10.2	12.7%
Cars	1.1	11.6	14.6	11.4	3.6%
Car expenses	1.1	2.1	9.4	10.0	5.8%
Public & private transportation services	2.4	1.4	0.9	8.8	3.3%
Telecommunications	-3.5	0.5	2.6	0.1	4.6%

Categories & sub-categories	2016	2017	2018	2019	Weighted average
Post service	0.0	33.8	0.0	0.0	0.0%
Telecommunication devices	-7.5	3.1	5.6	0.8	0.5%
Telecommunication services	-3.0	0.0	2.3	0.0	4.1%
Culture & entertainment	2.4	0.4	7.0	6.2	2.1%
Audio, visual & media devices	-3.0	-4.4	8.6	7.4	1.0%
Other entertainment devices	6.1	3.5	11.4	6.5	0.0%
Cultural & entertainment activities	6.2	3.5	5.9	5.1	0.4%
Cultural & entertainment services	11.2	8.2	5.1	4.3	0.4%
Newspapers, magazines & books	5.0	-0.1	5.8	6.9	0.2%
Education	8.2	7.4	7.5	7.3	3.2%
Elementary & preparatory education	7.3	5.3	6.7	6.4	0.8%
High school education	8.9	9.6	8.5	9.9	0.7%
Stationary	2.9	14.4	12.7	9.1	0.6%
Textbooks	2.8	0.0	0.0	0.0	0.2%
Private tutoring	13.4	4.7	5.5	6.0	0.9%
Hotels & restaurants	7.3	4.4	8.1	8.6	4.6%
Restaurants & coffee houses	7.8	4.8	8.6	7.8	4.1%
Hotels	3.6	1.7	3.4	15.7	0.5%

Categories & sub-categories	2016	2017	2018	2019	Weighted average
Other items & services	6.6	4.5	8.0	10.9	5.6%
Personal care	4.7	5.3	8.2	13.1	4.2%
Personal items	9.5	6.9	8.5	11.3	0.4%
Insurance	15.6	0.0	9.1	0.0	0.8%
Financial services	6.7	2.3	0.0	7.5	0.2%
Total	3.4	4.7	6.6	7.1	100,0%

**Household consumer price index according
to the pricing system**

Base year: 2015

January final results

Categories	%	Indicator	Indicator	Jan 2019	Jan. 2019	Jan 2019	1-month rate
		Dec 2018	Jan 2019	Dec 2018	Dec 2018	Jan 2018	2018/2019
Unpriced goods	73.5%	124.7	125.9	1.0	1.0	8.0	8.0
Priced goods	26.5%	110.6	111.0	0.4	0.4	4.4	4.4
Total	100.0%	121.0	122.0	0.8	0.8	7.1	7.1
Food products	26.2%	119.7	122.3	2.2	2.2	7.1	7.1

Categories	%	Indicator	Indicator	Jan 2019	Jan. 2019	Jan 2019	1-month rate
		Dec 2018	Jan 2019	Dec 2018	Dec 2018	Jan 2018	2018/2019
Unpriced	21.0%	123.7	126.6	2.3	2.3	8.2	8.2
Priced	5.2%	103.4	105.0	1.5	1.5	2.3	2.3
Non-food product	73.8%	121.5	121.9	0.4	0.4	7.1	7.1
Unpriced	52.5%	125.1	125.7	0.5	0.5	7.9	7.9
Priced	21.2%	112.4	112.5	0.1	0.1	4.9	4.9