

In 2017/18, the average Consumer Price Index (CPI) of goods and services in urban areas and Producer Price Index (PPI) (base year: 2016/17)¹ registered respectively 9.6 and 10.0 percent growth. A comparison of these figures with the respective figures in 2016/17 (9.0 and 4.9 percent) indicates a trivial rise in the growth rate of the CPI but a notable increase in the PPI inflation by 5.1 percentage points.

Following the commencement of the 11th government in 2013/14, factors like the fall in inflation expectations, stability in the foreign exchange market, strengthening of the monetary discipline, and decrease in the international prices of basic commodities (fuels, foodstuffs, and base metals) led to a downward trend in the CPI inflation. This downtrend continued until 2016/17 when

inflation recorded the single-digit rate of 9.0 percent after a long period of 26 years. Due to the continuation of regulatory policies and foreign exchange market stabilization measures, the single-digit rate of inflation was preserved in 2017/18 as well for the second consecutive year, an unprecedented achievement over the past decades.

The PPI inflation, which had surged by 46.1 percent in September 2013, decelerated for the next three years until October 2016, when it reversed for an upward trend. The increasing trend of the PPI inflation continued until 2017/18, affected by the increase in the inflation of "manufacturing" and "agriculture, forestry, and fishing" groups, and reached 10.0 percent. As the Producer Price Index is a leading indicator for the CPI, a rise in the CPI inflation in the coming years is well expected.

Table 17.1. Annual Average Percentage Change in Price Indices

	2016/17	2017/18
Consumer Price Index (CPI) of goods and services in urban areas (2016/17=100)	9.0	9.6
Producer Price Index (PPI) (2016/17=100)	4.9	10.0
Export Price Index (2011/12=100)	-2.7	20.6
GDP deflator (2011/12=100)	1.6	12.2
Non-oil GDP deflator (2011/12=100)	7.1	9.7

¹ For the updating of the relative weights calculated for the items on the PPI basket, the base year for the PPI was changed from 2011/12 to 2016/17.

Figure 17.1. Inflation of CPI and PPI (2016/17=100)

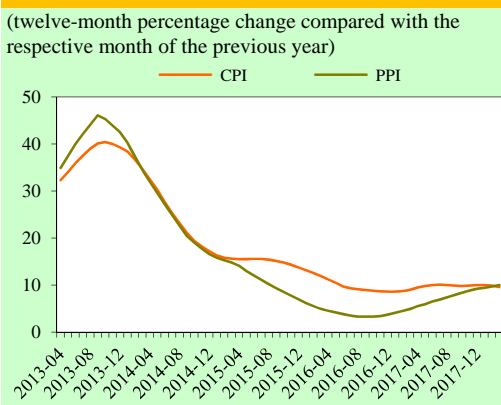
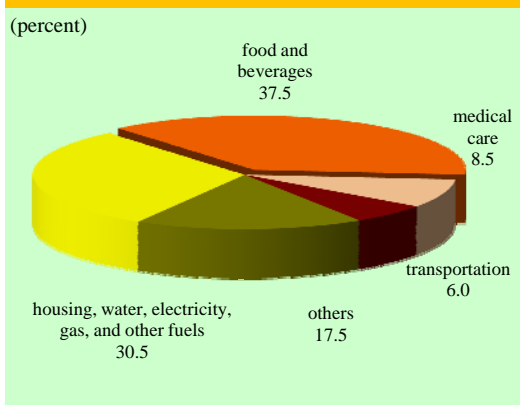


Figure 17.2. Share of major groups in CPI inflation in 2017/18



Consumer Price Index (CPI)

Urban Areas

A review of the major components of the CPI in 2017/18 indicates that "food and beverages" had the highest growth rate by 13.9 percent and the lowest growth rate of 3.1 percent was related to "tobacco". The major group of "food and beverages", with a relative weight of 25.5 percent in the general CPI had the lion's share of 37.5 percent in the growth of the general index in 2017/18.

After the major group of "food and beverages", growth in the price index of "housing, water, electricity, gas, and other fuels" had the most direct effect on raising the general index. This group, with a relative weight of 37.1 percent in the general index, grew by 8.1 percent and contributed by 30.5 percent to the growth in the general index. Therefore, the two major groups of "food and beverages" and "housing, water, electricity, gas, and other fuels", with a total relative weight of 62.6 percent, accounted for 68.0 percent of inflation in 2017/18.

Among the other major components of the CPI, the price index of "medical care", with 10.1 percent growth, had 8.5 percent

share in raising the general index. Transportation group, with 6.5 percent growth compared with the year before, accounted for 6.0 percent of the rise in the general CPI.

A review of the CPI changes in each month of 2017/18 compared with the month before (monthly inflation) points to the fluctuating trend of this index. The highest increase by 1.9 percent was related to December and the lowest growth by -0.3 percent was related to July 2017. The average monthly inflation of the CPI stood at 0.7 percent in 2017/18.

Reviewing the developments in the CPI by "tradable" and "non-tradable" special groups indicates that during 2012/13 and the period of April-September 2013, a sharp increase in the exchange rate, resulting from the expansionary monetary and fiscal policies of previous years and the imposition of severe economic sanctions, raised the inflation rate of tradable goods sharply. This variable hit the highest level of 57.9 percent in September 2013. Contrarily, the inflation of non-tradable goods, due to being unaffected by exchange rate developments (most items in this group are services-related), increased only slightly. With the commencement of

the 11th government in 2013/14 which led to the improvement of inflation expectations and the strengthening of the monetary discipline, the foreign exchange market was stabilized again, which in turn led to the downward trend of the inflation of tradable goods. With the continuation of this condition in the following years, the inflation of tradable goods remained at levels lower than the inflation of non-tradable goods as of October 2014.

Following the increase in the exchange rate as of July 2017, the inflation of tradable goods exceeded that of non-tradable goods again. In 2017/18, the average CPI of "tradable" and "non-tradable" special groups increased by respectively 10.6 and 8.9 percent compared with 2016/17. Comparing these figures with the corresponding figures in 2016/17 (6.9 and 11.5 percent) indicates an increase in the inflation of tradable goods but a decrease in that of non-tradable goods.

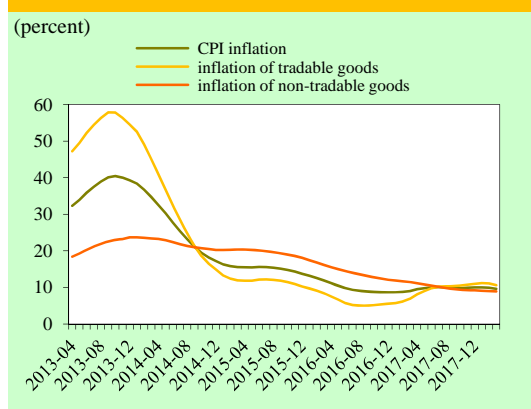
Table 17.2. Consumer Price Index in Urban Areas

(2016/17=100)

	Relative weight in base year (percent)	2016/17		2017/18		Direct effect ¹ on the growth of CPI in 2017/18	
		2016/17	2017/18	2016/17	2017/18	Percentage point	Percent
Special groups							
Goods	48.5	100.0	110.2	7.0	10.2	4.9	51.4
Services	51.5	100.0	109.2	11.8	9.2	4.7	48.6
General index	100.0	100.0	109.6	9.0	9.6	9.6	100.0
Major groups and selected subgroups							
Food and beverages	25.5	100.0	113.9	8.2	13.9	3.5	37.5
Meat	5.3	100.0	116.5	10.1	16.5	0.9	9.1
Fish and seafood	0.6	100.0	108.0	10.3	8.0	0.0	0.5
Bread and cereals	4.4	100.0	113.4	15.9	13.4	0.6	6.2
Fats and oils	0.8	100.0	112.1	6.6	12.1	0.1	1.1
Fruits and nuts	5.5	100.0	110.7	0.7	10.7	0.6	6.1
Vegetables, pulses, and vegetable products	3.5	100.0	121.3	3.4	21.3	0.7	7.7
Dairy products and eggs	3.0	100.0	112.2	5.6	12.2	0.4	3.8
Tobacco	0.4	100.0	103.1	10.0	3.1	0.0	0.1
Housing, water, electricity, gas, and other fuels	37.1	100.0	108.1	9.5	8.1	3.0	30.5
Rental value of non-owner occupied housing	7.7	100.0	108.3	9.8	8.3	0.6	6.7
Imputed rental value of owner-occupied housing	25.4	100.0	108.4	10.1	8.4	2.1	22.3
Maintenance and repair services	1.7	100.0	107.8	9.2	7.8	0.1	1.4
Water	0.5	100.0	100.0	6.6	0.0	0.0	0.0
Electricity, gas, and other fuels	1.8	100.0	103.4	1.5	3.4	0.1	0.6
Clothing and footwear	4.6	100.0	105.4	6.6	5.4	0.2	2.5
Furnishings, household equipment, and routine household maintenance	4.3	100.0	108.1	5.2	8.1	0.4	3.6
Transportation	8.9	100.0	106.5	7.1	6.5	0.6	6.0
Communication	2.3	100.0	105.9	3.5	5.9	0.1	1.4
Medical care	7.8	100.0	110.1	16.7	10.1	0.8	8.5
Recreation and culture	2.1	100.0	110.2	8.6	10.2	0.2	2.2
Education	2.0	100.0	111.3	16.0	11.3	0.2	2.4
Restaurants and hotels	1.8	100.0	111.3	9.5	11.3	0.2	2.1
Miscellaneous goods and services	3.2	100.0	110.2	9.7	10.2	0.3	3.3

¹ Calculated based on rounded figures of relative weight and price index.

Figure 17.3. CPI inflation by tradable and non-tradable goods (2016/17=100)



A review of the CPI developments in urban areas by provinces reveals that Mazandaran, Kohgiluyeh va Boyer-Ahmad, and Sistan and Baluchestan Provinces, with respectively 11.2, 10.9, and 10.9 percent growth in the CPI compared with 2016/17, had the highest inflation rates. Ilam, Golestan, and Chahar Mahal va Bakhtiari Provinces, with respectively 10.8, 10.7, and 10.7 percent, were next. Alborz and Bushehr Provinces accounted for the lowest rates of inflation by 8.2 and 8.3 percent, respectively. Inflation rate was 10.1 percent in Tehran Province.

Rural Areas¹

The CPI for rural areas went up by 8.8 percent in 2017/18 compared with the year before. Inflation in rural areas was the result of growth in the price index of "goods" with 9.6 percent and that of "services" with 7.2 percent compared with 2016/17. "Goods", with a relative weight of 68.8 percent in the general index, and "services", with a relative weight of 31.2 percent in the CPI of rural areas, raised the general index by respectively 74.2 and 25.8 percent.

¹ Source: "Consumer Price Index of Goods and Services in Rural Areas" published by the SCI (base year: 2016/17).

Producer Price Index (PPI)

In 2017/18, the Producer Price Index (PPI) increased by 10.0 percent compared with 2016/17. The growth rate of this index was 5.0 percent in 2015/16 and 4.9 percent in 2016/17. Among the major components of the PPI, "manufacturing" and "agriculture, forestry, and fishing" groups made the greatest contribution to raising the PPI general index by 50.4 and 20.5 percent, respectively. The price index of manufacturing group showed 10.7 percent growth in 2017/18. "Manufacturing", with a relative weight of about 47.1 percent in the general PPI, had a share of 50.4 percent in the growth of the general index in 2017/18.

The price index of "agriculture, forestry, and fishing" group, with a relative weight of 18.6 percent in the general index and a growth rate of 11.0 percent, made a contribution of 20.5 percent to the growth of the general index in 2017/18. Reviewing the monthly changes of the Producer Price Index (monthly inflation) indicates that the highest rate of inflation by 1.6 percent was related to August and the lowest by -0.1 percent, to May 2017. The average monthly inflation of the PPI reached 1.0 percent in 2017/18, which was 0.3 percentage point higher than the average rate of the previous year (0.7 percent).

Export Price Index

The Export Price Index is used in Iran to show the change in the general price level of non-oil exportables. For the compilation of this index, the price of exportable goods in the foreign currency is converted into the local currency so that the price index could reflect the change in the price of exportables in the international market as well as the developments of the exchange rate.

The Export Price Index rose 20.6 percent compared with the preceding year. This index decreased by 16.0 percent in 2015/16 and 2.7 percent in 2016/17. Among the components of this index, "mineral products" with 28.2 percent rise and "products of the chemical or allied industries", with 28.3 percent increase

(considering their high relative weight in the export price index) had the biggest impact on the rise of this index. "Raw hides and skins, leather and articles thereof" and "wood and articles of wood" groups experienced 2.8 and 0.2 percent decrease, respectively compared with 2016/17.

Table 17.3. Producer Price Index

(2016/17=100)

	Relative weight in base year (percent)	2016/17	2017/18	Percentage change		Direct effect ¹ on the growth of PPI in 2017/18	
				2016/17	2017/18	Percentage point	Percent
General index	100.0	100.0	110.0	4.9	10.0	10.0	100.0
Major groups							
Agriculture, forestry, and fishing	18.6	100.0	111.0	2.5	11.0	2.0	20.5
Manufacturing	47.1	100.0	110.7	3.6	10.7	5.0	50.4
Transport and storage	16.9	100.0	106.5	4.0	6.5	1.1	11.0
Communication	1.5	100.0	103.0	6.3	3.0	0.0	0.5
Hotels and restaurants	0.8	100.0	111.3	11.0	11.3	0.1	0.8
Education	2.5	100.0	111.6	16.1	11.6	0.3	2.9
Health and social work	11.6	100.0	110.7	17.5	10.7	1.2	12.5
Other community, social and personal service activities	0.9	100.0	112.3	12.7	12.3	0.1	1.1
Special groups							
Services	34.3	100.0	108.4	8.7	8.4	2.9	28.8

¹ Calculated based on rounded figures of relative weight and price index.

Table 17.4. Export Price Index

(2011/12=100)

	Relative weight in base year (percent)	2016/17	2017/18	Percentage change		Direct effect ¹ on the growth of EPI in 2017/18	
				2016/17	2017/18	Percentage point	Percent
General index	100.0	222.2	267.9	-2.7	20.6	20.6	100.0
Major groups							
Animal products	2.4	312.4	359.2	8.7	15.0	0.5	2.5
Vegetable products	10.4	275.1	306.1	-6.0	11.3	1.5	7.0
Animal or vegetable fats and oils	0.4	339.1	364.3	10.0	7.4	0.0	0.2
Prepared foodstuffs, beverages, and tobacco	3.7	327.8	360.2	7.0	9.9	0.5	2.6
Mineral products	31.8	168.7	216.2	-8.2	28.2	6.8	32.9
Products of the chemical or allied industries	20.1	208.6	267.5	-1.2	28.3	5.3	25.9
Plastic & articles thereof, rubber & articles thereof	10.5	268.6	305.1	-2.9	13.6	1.7	8.4
Raw hides and skins, leather and articles thereof	0.6	129.8	126.2	-6.9	-2.8	0.0	0.0
Wood and articles of wood	0.1	280.4	279.9	2.8	-0.2	0.0	0.0
Textiles and articles thereof	3.6	275.1	304.9	5.7	10.8	0.5	2.4
Footwear	0.5	394.9	455.3	3.7	15.3	0.1	0.6
Articles of stone	2.1	240.0	266.3	-1.4	10.9	0.3	1.2
Base metals and articles of base metals	9.7	205.4	270.8	-3.4	31.8	2.9	13.9
Mechanical appliances and electrical equipment	3.0	250.4	280.9	4.5	12.2	0.4	2.0
Vehicles and transport equipment	1.2	267.9	284.1	-1.3	6.1	0.1	0.4
Special groups							
Petrochemical products	46.3	196.4	249.3	-4.2	26.9	11.0	53.6

¹ Calculated based on rounded figures of relative weight and price index.

Return on Assets

A comparison of the total return on assets with the inflation rate in 2017/18 reveals that the growth rates of TEPIX, full Bahar Azadi gold coin price (new design), the nominal value of the euro, the provisional profit rate of participation papers issued by the government, the price of residential units in Tehran per square meter, the highest provisional profit rate on one-year deposits, and the nominal value of the US dollar, by respectively 24.7, 19.4, 19.0, 17.5, 17.0, 15.0 and 11.0 percent,

were higher than the inflation rate in 2017/18 (9.6 percent). Meanwhile, the rental value of non-owner occupied housing experienced a growth rate of 8.3 percent. During 2015-2018, the average rates of return on all assets were positive. It is noteworthy that the provisional profit rate of participation papers issued by the government and the highest provisional profit rate on one-year deposits enjoyed the highest rates of return by 17.5 and 16.7 percent, respectively.

Table 17.5. Total Return on Assets (percent)

	Growth during the year			Average rate of return ¹	Standard deviation	Sharpe Ratio ²
	2015/16	2016/17	2017/18			
Price of residential units in Tehran per square meter ³	2.3	7.2	17.0	8.6	7.5	-1.2
TEPIX	28.3	-3.7	24.7	15.5	17.5	-0.1
Rental value of non-owner occupied housing	12.5	9.8	8.3	10.2	2.1	-3.5
Nominal value of US dollar (unofficial market)	5.2	5.6	11.0	7.2	3.2	-3.2
Nominal value of euro (unofficial market)	-9.0	5.7	19.0	4.6	14.0	-0.9
Full Bahar Azadi gold coin price (new design)	-3.3	19.0	19.4	11.2	13.0	-0.5
Provisional profit rate of participation papers issued by government ⁴	19.5	15.5	17.5	17.5	2.0	0.0
Provisional profit rate of one-year deposits (highest approved rate)	20.0	15.0	15.0	16.7	2.9	-0.3
CPI of goods and services (inflation rate)	11.9	9.0	9.6	10.2	1.5	-4.8

¹ The average rate of return on assets (except for participation papers, one-year investment deposits, and the CPI of goods and services) is calculated using the geometric mean method over 2015-2018.

² The Sharpe Ratio is calculated by dividing the difference between the average rate of return for an asset and the risk-free asset (participation papers) by the standard deviation of return on that risky asset.

³ Source: SCI.

⁴ Includes only those participation papers whose first date of issuance was in 2017/18.