

In 1391, average consumer price index (CPI) of goods and services in urban areas registered 30.5 percent growth (base year: 1390) and the producer price index (PPI) rose by 29.6 percent (base year: 1383). Comparing these figures with the corresponding figures in 1390 (21.5 and 34.2 percent, respectively) indicates that both indices enjoyed positive growth in this year while the growth figure for PPI was lower than the year before.

Table 17.1. Annual Average Percentage Change in Price Indices (1383=100)

	1390	1391
Consumer price index (CPI) of goods and services in urban areas (1390=100)	21.5	30.5
Producer price index (PPI)	34.2	29.6
Exportable goods price index	14.2	88.6
GDP deflator (basic price)	26.3	21.8
Non-oil GDP deflator (basic price)	17.2	27.7

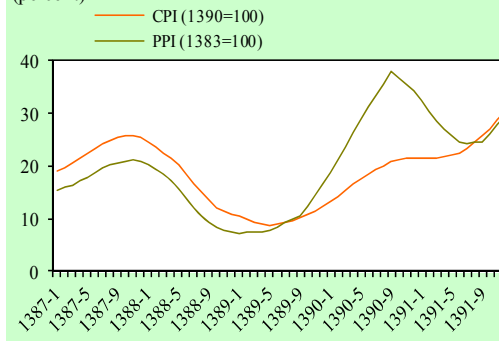
The CPI changes year-on-year indicate that this index (inflation rate) followed a downward trend from 25.9 percent in Bahman 1387 to 8.8 percent in Mordad 1389. This trend was reversed later and the inflation rate increased from 8.9 percent in Shahrivar to 10.1 percent in Azar 1389. With the implementation of Subsidy Reform Plan, as of late-Azar 1389, the inflation rate continued to rise and reached 12.4 percent in Esfand 1389, 13.2 percent in Farvardin 1390, and 21.5 percent in Esfand 1390. Intensification of inflationary pressures, emanating from the adoption of the expansionary

monetary policy of recent years, rise in the exchange rate, and imposing of severe economic restrictions, caused the rate of inflation to increase from 21.5 percent in Farvardin 1391 to 30.5 percent in Esfand.

Similarly, the PPI followed a downtrend from 21.1 percent in Bahman 1387 to 7.3 percent in Farvardin 1389. However, it increased from 7.4 percent in Khordad 1389 to 10.4 percent in Azar and 16.6 percent in Esfand 1389. This upward trend continued in 1390 and the PPI increased from 18.9 percent in Farvardin to 37.9 percent in Azar 1390. This trend was later reversed and the PPI fell from 36.9 percent in Dey to 24.4 percent in Mehr 1391. As of Aban, the declining trend of the PPI stopped and this index rose from 24.6 percent to 29.6 percent in Esfand 1391.

Figure 17.1. Changes of CPI and PPI

(compared with the respective period of the previous year)
(percent)



Consumer Price Index (CPI)

Urban Areas

Review of major components of the CPI indicates that the growth rates of all groups, except for "housing, water, electricity, gas, and other fuels", were higher than those of 1390. Among the major groups, "tobacco" had the highest growth rate by 82.5 percent. In this year, the lowest growth rate of 7.5 percent was related to "communication".

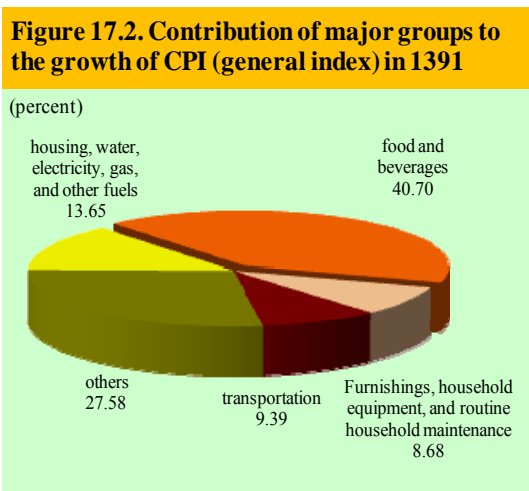
In 1391, the major group of "food and beverages", with a relative weight of 27.38 percent in CPI and a growth rate of 44.6 percent compared with the preceding year, had the lion's share of 40.7 percent in the growth of the general index. This was mainly attributable to 49.0 percent increase in the price index of "meat", accounting for 24.6 percent of the rise in the "food and beverages" index and 9.82 percent of the rise in the general index.

After the major group of "food and beverages", growth in 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 32.82 percent in general index, grew by 12.9 percent and contributed by 13.65 percent to the growth in general index. The main factor behind the growth of this index was the growth in the price index of "imputed rental value of owner-occupied housing" by 12.3 percent, which accounted for the lion's share in the rise in "housing, water, electricity, gas, and other fuels" index.

Therefore, the two major groups of "food and beverages" and "housing, water, electricity, gas, and other fuels", with a total relative weight of 60.2 percent, together accounted for 54.35 percent of the inflation in 1391.

In 1391, price index of "tobacco" group, with 82.5 percent growth compared with the year before, registered the highest growth among both major groups and selected subgroups of the CPI. The main factor behind the rise in the price index of this group was the annual increase in price index of various types of imported cigarettes by 83.3 percent, accounting for 76.0 percent of the increase in the price index of "tobacco". Moreover, the price index of different types of domestically produced cigarettes rose by 80.3 percent annually.

Among other major components of CPI, the price index of "transportation", with 29.5 percent growth compared with the year before, had 9.39 percent share in raising the general index. Growth in the index of this group was 27.6 percent in 1390. In this year, price index of "personal vehicles" increased by 43.3 percent, constituting about 57.0 percent of the rise in price index of "transportation" group. In "transportation" group, price index of "travel expenses" rose 24.8 percent.



The growth rate in price index of "furnishings, household equipment, and routine household maintenance" group rose from 18.3 percent in 1390 to 50.9 percent in 1391. The annual increase in the price index of "home appliances" group was 65.0 percent, mainly attributable to the rise in the price of electrical appliances by 68.7 percent. Furthermore, in 1391, the price index of "kitchenware" group went up by 73.1 percent.

A review of CPI changes in each month of 1391 compared with the month before

points to the upward trend of this index in all months of 1391. The highest increase by 5.3 percent was related to Bahman, and the lowest increase by 1.0 percent was related to Khordad, compared with the month before.

A review of CPI developments in urban areas by provinces reveals that, in 1391, North Khorasan, Yazd, and Hamedan provinces, with respectively 34.9, 34.8, and 34.6 percent growth in the CPI compared with 1390, had the highest inflation rates.

Table 17.2. Annual Average Consumer Price Index in Urban Areas (1390=100)

			Percentage change		Contribution to the growth of general index in 1391	
	1390	1391	1390	1391	Percentage point	Percent
Special groups						
Goods	100.0	141.8	27.4	41.8	22.0	73.02
Services	100.0	117.6	14.7	17.6	8.3	26.98
Housing, water, electricity, gas, and other fuels	100.0	112.9	18.2	12.9	4.3	13.65
General index	100.0	130.5	21.5	30.5	30.5	100.00
Major groups and selected subgroups						
Food and beverages	100.0	144.6	25.9	44.6	12.2	40.70
Meat	100.0	149.0	11.4	49.0	3.0	9.82
Fish and seafood	100.0	162.7	17.8	62.7	0.5	1.50
Bread and cereals	100.0	137.3	55.0	37.3	1.9	6.18
Fats and oils	100.0	144.4	44.7	44.4	0.4	1.37
Fruits and nuts	100.0	139.1	18.5	39.1	2.1	6.90
Vegetables, pulses, and vegetable products	100.0	144.7	21.4	44.7	1.5	5.01
Dairy products and birds' eggs	100.0	153.9	33.7	53.9	1.7	5.42
Tobacco	100.0	182.5	6.4	82.5	0.3	0.94
Housing, water, electricity, gas, and other fuels	100.0	112.9	18.2	12.9	4.3	13.65
Rental value of non-owner occupied housing	100.0	112.6	11.1	12.6	0.9	3.10
Imputed rental value of owner-occupied housing	100.0	112.3	11.1	12.3	2.6	8.40
Maintenance and repair services	100.0	133.9	17.1	33.9	0.6	1.90
Water	100.0	121.0	78.6	21.0	0.1	0.37
Electricity, gas, and other fuels	100.0	100.8	194.1	0.8	0.0	0.06
Clothing and footwear	100.0	147.8	22.1	47.8	2.4	8.07
Furnishings, household equipment, and routine household maintenance	100.0	150.9	18.3	50.9	2.6	8.68
Transportation	100.0	129.5	27.6	29.5	2.9	9.39
Communication	100.0	107.5	1.8	7.5	0.2	0.55
Medical care	100.0	124.7	17.2	24.7	1.7	5.69
Recreation and culture	100.0	141.0	14.4	41.0	1.2	3.85
Education	100.0	114.1	14.0	14.1	0.3	1.04
Restaurants and hotels	100.0	138.7	17.9	38.7	0.7	2.40
Miscellaneous goods and services	100.0	146.6	22.0	46.6	1.5	5.04

The lowest rate of inflation, by 26.5 percent, was related to Tehran Province which, due to its population and share in total expenditures of urban households, had a relative weight of 29.0 percent in the general index. Surge in the CPI in Tehran Province raised the general index of urban areas by 7.7 percentage points, and had a share of 25.2 percent in raising the general index. Isfahan Province with 9.0 percent share, Khorasan Razavi Province with 7.0 percent, and Fars Province with 6.1 percent, ranked next in terms of contribution to CPI growth in all urban areas.

Rural Areas¹

CPI for rural areas went up by 33.8 percent compared with the previous year. Inflation in rural areas was the result of growth in the price index of "goods" with 36.8 percent and "services" with 20.9 percent, compared with 1390. "Goods", with a relative weight of 76.3, and "services", with a relative weight of 23.7 percent in the general index, raised this index by 88.3 and 11.7 percent, respectively.

In 1391, price index of "food, beverages, and tobacco" grew by 39.6 percent, compared with the previous year, largely due to increase in the growth rates of "bread and cereals", "vegetables and pulses", and "meat, poultry, and their products" groups. "Food, beverages, and tobacco" group constituted 65.2 percent of the rise in CPI for rural areas, and "non-food goods and services", 34.8 percent.

After "food, beverages, and tobacco" group, "clothing and footwear" with 7.2 percent, "miscellaneous goods and services" with 7.2 percent, and "housing, water, electricity, gas, and other fuels" with 6.3 percent,

¹ Source: "Consumer Price Index of Goods and Services in Rural Areas" published by the SCI (base year: 1381)

had the highest shares in raising the general index. These four groups together accounted for 85.9 percent of the growth in the general index in rural areas.

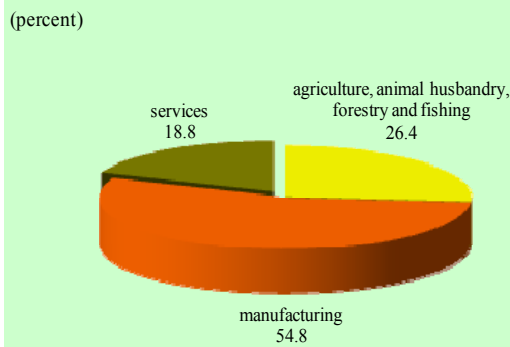
Producer Price Index (PPI)

In 1391, producer price index (PPI) rose by 29.6 percent compared with last year. The growth rate of this index was 16.6 percent in 1389, and 34.2 percent in 1390. Among the major components of PPI, "manufacturing", "agriculture, hunting, and forestry", and "transport, storage, and communication" groups made the greatest contribution to raising the general index.

In 1391, the price index of "manufacturing" group, with 29.6 percent growth compared with 54.3 percent increase in the previous year, had 54.8 percent contribution to the growth of the general index.

The price index of "agriculture, hunting, and forestry" group, with a relative weight of 21.35 percent in the general index and a growth rate of 37.6 percent, made a contribution of 25.1 percent to the growth of the general index.

Figure 17.3. Contribution of special groups to the growth of PPI in 1391



In 1391, the price indices of "transport, storage, and communication" and "health and social work" groups, with respectively 20.3 and 28.6 percent growth, accounted for the rise in the general index by 9.7 and 4.8 percent, respectively.

Over 78.0 percent of the rise in "transport, storage, and communication" price index in 1391 was attributable to increase in the price indices of "air transport" by 42.5 percent, "fare for inner city taxi service" by 23.6 percent, and "road freight transport" by 19.3 percent.

The price indices of "manufacturing", "agriculture, hunting, and forestry", "transport, storage, and communication", and "health and social work" groups, with a total relative weight of 94.4 percent, together accounted for 94.4 percent of the growth in the general index in 1391.

The producer price index followed an upward trend during all months of 1391

compared with the month before. The highest rise by 8.2 percent was related to the month of Mehr and the lowest rise by 0.2 percent, to Azar.

Exportable Goods Price Index

Exportable goods price index is one of the price indices used in Iran to show the change in the general price level of non-oil exportables. For compilation of this index, the price of exportables in foreign currency is converted into local currency. The changes of this index could reflect the change in both the prices of exportables in the international markets and the exchange rate. Due to higher injection of the foreign currency receipts to the parallel market since Mehr 1391, the parallel market rate has been used for the compilation of the exportable goods price index instead of the reference rate. This was the main reason behind the increase in price index of exportable goods, especially during the second half of 1391.

Table 17.3. Annual Average Producer Price Index

(1383=100)

	1390	1391	Percentage change		Contribution to the growth of general index in 1391	
			1390	1391	Percentage point	Percent
Special groups						
Agriculture, animal husbandry, forestry, and fishing	264.2	365.0	17.2	38.2	7.8	26.4
Manufacturing	323.3	419.0	54.3	29.6	16.2	54.8
Services	233.7	286.5	15.0	22.6	5.6	18.8
General index	283.5	367.4	34.2	29.6	29.6	100.0
Major groups						
Agriculture, hunting, and forestry	262.5	361.1	16.6	37.6	7.4	25.1
Fishing	322.3	495.9	35.4	53.9	0.4	1.3
Manufacturing	323.3	419.0	54.3	29.6	16.2	54.8
Hotels and restaurants	319.0	423.3	18.9	32.7	0.3	1.1
Transport, storage, and communication	190.2	228.9	12.3	20.3	2.9	9.7
Education	279.5	318.6	14.0	14.0	0.3	1.1
Health and social work	353.8	455.0	19.2	28.6	1.4	4.8
Other community, social & personal service activities	387.5	495.5	22.7	27.9	0.6	2.1

Chapter 17 PRICE TRENDS

Price index of "exportable goods" rose by 88.6 percent compared with the preceding year¹. This index grew by 11.0 and 14.2 percent in 1389 and 1390, respectively. Among the components of the price index of "exportable goods", "mineral products" with 181.9 percent growth, "vegetable products" with 88.1 percent growth, and "base metals and articles of base metals" with 47.7 percent growth, had the lion's share in raising the general index.

Total Return on Assets

Comparison of the total return on assets (price movements+yields) with the inflation rate reveals that, in 1391, the nominal value

of the US dollar (parallel market), the nominal value of the euro (parallel market), full Bahar Azadi gold coin price (old and new designs), land price index, TEDPIX, and price indices of Samand and Pride cars were experiencing an increase higher than the inflation rate, while for other assets, the rate of return was lower than the inflation rate. The nominal value of the US dollar (parallel market), with 92.1 percent, the nominal value of the euro (parallel market), with 81.8 percent, and full Bahar Azadi gold coin price (new design), with 80.2 percent, had the highest growth rates in 1391. During 1389-1391, full Bahar Azadi gold coin price (new design) had the highest average rate of return on assets by 61.6 percent.

Table 17.4. Annual Average Price Index of Exportable Goods

(1383=100)

	1390	1391	Percentage change		Contribution to the growth of general index in 1391	
			1390	1391	Percentage point	Percent
Animal products	167.2	244.4	17.9	46.2	0.7	0.8
Vegetable products	250.1	470.4	0.5	88.1	14.5	16.4
Animal and vegetable fats and oils	311.8	501.1	30.5	60.7	0.5	0.6
Prepared foodstuffs, beverages, and tobacco	233.5	404.0	15.3	73.0	2.2	2.4
Mineral products	321.4	906.0	21.1	181.9	47.4	53.5
Products of the chemical or allied industries	191.6	312.3	25.4	63.0	6.3	7.1
Plastic & articles thereof, rubber & articles thereof	156.7	232.3	15.6	48.2	1.2	1.4
Raw hides and skins, leather and articles thereof	270.8	462.8	49.0	70.9	1.2	1.3
Wood and articles of wood	175.7	212.8	1.4	21.1	0.0	0.0
Textiles and articles thereof	248.8	316.7	11.4	27.3	4.0	4.5
Footwear	230.7	253.0	36.5	9.7	0.1	0.1
Articles of stone	148.6	267.7	8.1	80.1	1.4	1.6
Base metals and articles of base metals	208.8	308.3	14.5	47.7	8.1	9.2
Mechanical appliances and electrical equipment	167.4	187.8	5.6	12.2	0.3	0.3
Vehicles and transport equipment	140.6	214.1	1.3	52.3	0.7	0.8
Medical, precision, and optical instruments	152.3	152.3	0.5	0.0	0.0	0.0
General index	234.7	442.7	14.2	88.6	88.6	100.0

¹ Compilation of the exportable goods price index is based on the price of exported goods in the Iranian rial. In 1391, rise in this index was mainly due to the increase in the exchange rate in the parallel market.

Circulation Velocity of Money

Circulation velocity of money was within the range of 6.2 to 7.0 and that of liquidity, within 1.5 to 1.8 during the course of 1389-1391. The nominal GDP growth was 31.7 percent in 1390 and 13.5 percent in 1391. Moreover, liquidity growth was 20.1 percent in 1390 and 30.0 percent in 1391. Circulation velocity of notes and coins, money, and liquidity in 1391 was lower than that in 1390. In Esfand 1391, consumer price index of goods and services grew by 41.2 percent compared with the same month last

year, much higher than the corresponding figure of the previous year (20.5 percent).

Table 17.6. Circulation Velocity of Monetary Aggregates (percent)

	1389	1390	1391
Notes and coins	21.1	23.7	21.5
Money	6.2	7.0	6.2
Liquidity	1.6	1.8	1.5
CPI changes (1390=100) (compared with Esfand of the year before)	19.7	20.5	41.2

Table 17.5. Total Return on Assets (price movements+yields) (1390=100) (percent)

	Growth during the year			Average rate of return ¹	Standard deviation	Sharpe ratio ²
	1389	1390	1391			
Land price index (all urban areas)▲	0.1	17.5	56.8	22.6	29.0	0.1
TEDPIX	85.8	11.2	46.8	44.8	37.3	0.7
Rental value of non-owner occupied housing	6.0	11.1	12.6	9.9	3.4	-2.6
Nominal value of US dollar (parallel market)	6.2	28.0	92.1	37.7	44.6	0.4
Nominal value of euro (parallel market)	-0.7	33.3	81.8	34.0	41.5	0.4
Full Bahar Azadi gold coin price (old design)	41.8	68.0	72.7	60.2	16.6	2.5
Full Bahar Azadi gold coin price (new design)	34.6	74.1	80.2	61.6	24.7	1.7
Provisional profit rate of participation papers issued by the government	16.5	20.0	20.0	18.8	2.0	0.0
Provisional profit rate of one-year term deposits (highest rate)▲	14.0	17.0	17.0	16.0	1.7	-1.6
Price index of Samand cars▲	0.9	0.1	31.5	9.9	17.9	-0.5
Price index of Pride cars	0.3	2.9	39.7	13.0	22.1	-0.3
Consumer price index of goods and services	12.4	21.5	30.5	21.3	9.1	0

¹ Average return on assets (except for participation papers and term deposits) is calculated using the geometric mean method over 1389-1391.

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 risky assets.

Box 17.1. Consumer Price Index (CPI) of Goods and Services in Urban Areas (base year: 1390)

Introduction

The CPI is the measuring index for the price change in goods and services consumed by Iranian households residing in urban areas. The CPI, as a benchmark for measurement of the general level of price of goods and services consumed by households, is the best criterion for the assessment of the purchasing power of the Iranian rial. Economic and social factors as well as technological progress change the consumption pattern of households over time, leading to changes in household consumption expenditures on goods and services. Therefore, revision of the base year for CPI over regular time intervals is necessary.

Central Bank of the Islamic Republic of Iran revised the base year for the compilation of CPI in the years 1338, 1348, 1353, 1361, 1369, 1376, 1383, and 1390. The last revision in 1390 was carried out as a result of the developments in consumption pattern in urban areas over the preceding years. On this basis, the number of selected goods and services as components of CPI increased from 359 (base year: 1383) to 385 (base year: 1390).

Geographical Coverage

The validity and reliability of the CPI are well reflected in its geographical expansion. Clearly, the consumption pattern as well as individual taste is affected by the climatic and geographical conditions. For the proper coverage of all urban areas, 79 cities were selected as sample, adopting appropriate standard methodologies, in a way that price changes in those cities could be indicative of price changes in the

relevant provinces and all urban areas. Finally, CPI was independently compiled for 31 provinces and by combining the consumer price indices of various provinces, the general index for all urban areas was derived.

Demographic Coverage

In base year 1390, a total of 16,000 households were specified among the households residing in the mentioned 79 sample cities so that their average expenditure would appropriately represent the average expenditure of all households residing in Iranian cities. Sample households were scheduled so as to represent different income levels and consumption patterns. Central Bank's statisticians, after directly calling on the sample households and collecting the required data, verified households' expenditure figures in detail and then generalized the results for all the households residing in the relevant provinces, and later for all urban areas. Therefore, the expenditure on all goods and services purchased and consumed by the households during the year was estimated.

Goods and Services as CPI Components

Due to changes in the households' consumption pattern, selection of goods and services to be included under the CPI was revised in 1390, based on the result of urban households' budget survey. Therefore, 294 goods and 91 services (a total of 385), adopting the standard and appropriate methodologies, were chosen based on their relative weights, to be included under the CPI.

Box 17.1. (cont.)**Classification of Goods and Services**

Based on Classification of Individual Consumption by Purpose (COICOP), the mentioned 385 goods and services were classified under 12 major groups whose relative weight is as follows:

Each major expenditure group is divided into several subgroups, each of which is composed of a number of goods and services whose features are similar according to the COICOP.

Major groups	Relative weight (base year:1390)	Relative weight (base year:1383)
1. Food and beverages	27.38	28.49
2. Tobacco	0.35	0.52
3. Clothing and footwear	4.94	6.22
4. Housing, water, electricity, gas and other fuels	32.82	28.60
5. Furnishings, household equipment, and routine household maintenance	5.13	6.26
6. Medical care	6.98	5.54
7. Transportation	9.87	11.97
8. Communication	2.38	1.63
9. Recreation and culture	2.85	3.80
10. Education	2.24	2.07
11. Restaurants and hotels	1.86	1.72
12. Miscellaneous goods and services	3.20	3.18