

In 1390, average consumer price index (CPI) of goods and services in urban areas and producer price index (PPI) (base year: 1383) rose by 21.5 and 34.2 percent, respectively, compared with the previous year. Comparing these figures with those of 1389 (12.4 and 16.6 percent, respectively) indicates increase in both indices during this year.

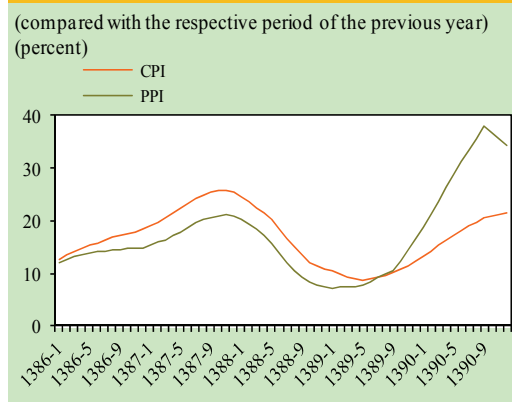
**Table 18.1. Annual Average Percentage Change in Price Indices (1383=100)**

	1389	1390
Consumer price index (CPI) of goods and services in urban areas	12.4	21.5
Producer price index (PPI)	16.6	34.2
Exportable goods price index	11.0	14.2
GDP deflator (basic price)	14.4	26.3
Non-oil GDP deflator (basic price)	10.5	17.2

Following the adoption of CBI control policies in 1387 for liquidity management which had a lagged effect on the general level of prices in 1388 and the beginning of 1389, 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. 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 34.2 percent in Esfand 1390.

**Figure 18.1. Changes of CPI and PPI (1383=100)**



### Consumer Price Index (CPI)

#### Urban Areas

Review of the major components of the CPI indicates that the growth rates of all groups, except for "medical care", were higher than those of 1389. Among the major groups, "transportation" had the highest growth rate

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by 27.6 percent. In this year, the lowest growth rate of 1.8 percent was related to "communication".

In 1390, the major group of "food and beverages", with a relative weight of 28.49 percent in CPI and a growth rate of 25.9 percent compared with the preceding year, had the lion's share of 38.75 percent in the growth of the general index. This was mainly attributable to 54.9 percent increase in the price index of "bread and cereals", accounting for 34.82 percent of the rise in the "food and beverages" index and 13.49 percent of the rise in the general index.

After the major group of "food and beverages", the 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 28.6 percent in general index, grew by 18.3 percent and contributed by 25.17 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 11.1 percent, which accounted for the lion's share in the rise in "housing, water, electricity, gas and other fuels" index.

**Table 18.2. Annual Average Consumer Price Index in Urban Areas** (1383=100)

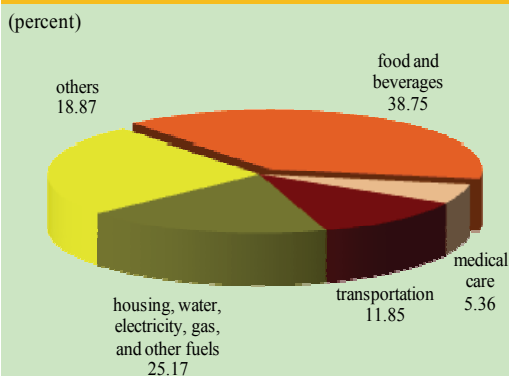
	1389	1390	Percentage change		Contribution to the growth of general index in 1390	
			1389	1390	Percentage point	Percent
<b>Special groups</b>						
Goods	214.9	273.6	14.0	27.3	14.7	68.18
Services	245.8	282.0	10.6	14.7	6.8	31.82
Housing, water, electricity, gas, and other fuels	236.2	279.3	7.3	18.3	5.4	25.17
<b>General index</b>	<b>228.2</b>	<b>277.2</b>	<b>12.4</b>	<b>21.5</b>	<b>21.5</b>	<b>100.00</b>
<b>Major groups and selected subgroups</b>						
<b>Food and beverages</b>	<b>254.1</b>	<b>320.0</b>	<b>16.2</b>	<b>25.9</b>	<b>8.2</b>	<b>38.75</b>
Meat	274.7	305.8	27.3	11.3	0.9	4.27
Fish and seafood	246.4	290.4	12.1	17.9	0.2	0.71
Bread and cereals	264.1	409.1	17.1	54.9	2.9	13.49
Fats and oils	249.1	360.7	32.9	44.8	0.5	2.21
Fruits and nuts	258.7	306.7	5.0	18.6	1.1	5.15
Vegetables, pulses, and vegetable products	261.1	316.8	21.3	21.3	0.9	4.40
Dairy products and birds' eggs	200.6	268.3	4.0	33.7	1.0	4.80
<b>Tobacco</b>	<b>223.4</b>	<b>237.6</b>	<b>2.3</b>	<b>6.4</b>	<b>*</b>	<b>0.15</b>
<b>Housing, water, electricity, gas, and other fuels</b>	<b>236.2</b>	<b>279.3</b>	<b>7.3</b>	<b>18.3</b>	<b>5.4</b>	<b>25.17</b>
Rental value of non-owner occupied housing	236.8	263.0	6.0	11.1	0.7	3.10
Imputed rental value of owner-occupied housing	238.5	264.9	6.6	11.1	2.2	10.33
Maintenance and repair services	293.1	343.0	8.6	17.0	0.4	1.85
Water	136.4	243.4	3.3	78.4	0.2	0.96
Electricity, gas, and other fuels	162.4	477.5	32.9	194.0	1.9	8.81
<b>Clothing and footwear</b>	<b>200.9</b>	<b>245.4</b>	<b>11.7</b>	<b>22.1</b>	<b>1.2</b>	<b>5.56</b>
<b>Furnishings, household equipment, and routine household maintenance</b>	<b>203.7</b>	<b>241.2</b>	<b>9.2</b>	<b>18.4</b>	<b>1.0</b>	<b>4.88</b>
<b>Transportation</b>	<b>181.2</b>	<b>231.2</b>	<b>14.8</b>	<b>27.6</b>	<b>2.6</b>	<b>11.85</b>
<b>Communication</b>	<b>97.1</b>	<b>98.9</b>	<b>-0.2</b>	<b>1.8</b>	<b>*</b>	<b>0.05</b>
<b>Medical care</b>	<b>270.9</b>	<b>317.5</b>	<b>19.9</b>	<b>17.2</b>	<b>1.1</b>	<b>5.36</b>
<b>Recreation and culture</b>	<b>162.1</b>	<b>185.5</b>	<b>11.6</b>	<b>14.4</b>	<b>0.4</b>	<b>1.76</b>
<b>Education</b>	<b>245.3</b>	<b>279.7</b>	<b>12.8</b>	<b>14.0</b>	<b>0.3</b>	<b>1.49</b>
<b>Restaurants and hotels</b>	<b>254.7</b>	<b>300.5</b>	<b>16.7</b>	<b>18.0</b>	<b>0.3</b>	<b>1.62</b>
<b>Miscellaneous goods and services</b>	<b>234.7</b>	<b>286.3</b>	<b>13.1</b>	<b>22.0</b>	<b>0.7</b>	<b>3.36</b>

Therefore, the two major groups of "food and beverages" and "housing, water, electricity, gas and other fuels", with a total relative weight of 57.09 percent, together accounted for 63.92 percent of the inflation in 1390.

Among other major components of the CPI, the price index of "transportation", with 27.6 percent growth compared with the year before, had 11.85 percent share in raising the general index. Growth in the index of this group was 14.8 percent in 1389. In "transportation" group, the price index of "travel expenses" rose 28.3 percent.

The growth rate in the price index of the "medical care" group fell from 19.9 percent in 1389 to 17.2 percent in 1390. The main reason for this reduction was decline of growth in the price index of the "medical, dental, and paramedical" subgroup from 22.1 percent in 1389 to 19.3 percent in 1390, which accounted for 65.0 percent of the increase in the price index of the "medical care" group.

**Figure 18.2. Contribution of major groups to the growth of CPI (general index) in 1390**



A review of CPI monthly changes points to the upward trend of this index in all months of 1390. The highest increase by 3.4 percent was related to Esfand and the lowest increase to Tir by 0.1 percent, compared with the month before.

A review of CPI developments in urban areas by provinces reveals that, in 1390, South Khorasan, North Khorasan, and Khorasan Razavi, with respectively 28.0, 25.5, and 25.2 percent growth in the CPI compared with 1389, had the highest inflation rates. The lowest rate of inflation was related to Gilan Province by 19.2 percent. Moreover, in terms of the general level of prices, in 1390, Bushehr Province experienced the lowest, and Qom Province the highest level of prices, compared with the base year (1383=100).

In 1390, inflation rate was 19.9 percent in Tehran Province which, due to its population and share in total expenditures of urban households, had a relative weight of 33.05 percent in the general index. Surge in the CPI in Tehran Province raised the general index of urban areas by 6.5 percentage points, and had a share of 30.1 percent in raising the general index. Isfahan Province with 8.4 percent share, Khorasan Razavi Province with 7.3 percent, and Fars Province with 5.4 percent, ranked next in terms of contribution to CPI growth in all urban areas.

### Rural Areas<sup>1</sup>

CPI for rural areas went up by 36.5 percent compared with the previous year. Inflation in rural areas was the result of growth in the price index of "goods" with 43.4 percent and "services" with 13.2 percent, compared with 1389. These special groups, with a relative weight of respectively 76.3 and 23.7 percent in the general index, raised this index by 91.7 and 8.3 percent, respectively.

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

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In 1390, price index of "food, beverages, and tobacco" grew by 47.2 percent, compared with the previous year, largely due to increase in the growth rates of "bread and cereals", "vegetables and pulses", and "fruits and nuts" groups. "Food, beverages, and tobacco" group constituted 66.8 percent of the rise in CPI for rural areas, and "non-food goods and services", 33.2 percent.

After "food, beverages, and tobacco" group, "housing, water, electricity, gas and other fuels" with 16.5 percent, "transportation" with 4.6 percent, "miscellaneous goods and services" with 4.1 percent, and "clothing and footwear" with 3.3 percent, had the highest shares in raising the general index. These five groups together accounted for 95.3 percent of the growth in the general index in the rural areas.

### Producer Price Index (PPI)

In 1390, producer price index (PPI) rose by 34.2 percent compared with last year. The growth rate of this index was 7.4 percent in 1388, and 16.6 percent in 1389. Among the major components of the PPI, "manufacturing", "agriculture, hunting, and forestry",

and "transport, storage, and communication" groups made the greatest contribution to raising the general index.

In 1390, the price index of "manufacturing" group, with 54.3 percent growth compared with 22.0 percent increase in the previous year, had 75.6 percent contribution to the growth of 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 16.6 percent, made a contribution of 11.1 percent to the growth of general index.

The price indices of "transport, storage, and communication" and "health and social work" groups, with respectively 12.3 and 19.2 percent growth, accounted for the rise in the general index by 6.1 and 3.1 percent, respectively.

Over 70.0 percent of the rise in "transport, storage, and communication" price index was attributable to increase in the price indices of "bus ticket" by 21.2 percent, "fare for intra-city taxi service" by 29.5 percent, and "road freight transport" by 7.9 percent.

**Table 18.3. Annual Average Producer Price Index** (1383=100)

	1389	1390	Percentage change		Contribution to the growth of general index in 1390	
			1389	1390	Percentage point	Percent
<b>Special groups</b>						
Agriculture, animal husbandry, forestry, and fishing	225.5	264.2	12.4	17.2	4.0	11.8
Manufacturing	209.5	323.3	22.0	54.3	25.9	75.6
Services	203.3	233.7	11.8	15.0	4.3	12.6
<b>General index</b>	<b>211.2</b>	<b>283.5</b>	<b>16.6</b>	<b>34.2</b>	<b>34.2</b>	<b>100.0</b>
<b>Major groups</b>						
Agriculture, hunting, and forestry	225.1	262.5	12.2	16.6	3.8	11.1
Fishing	238.1	322.3	16.8	35.4	0.3	0.7
Manufacturing	209.5	323.3	22.0	54.3	25.9	75.6
Hotels and restaurants	268.4	319.0	18.9	18.9	0.2	0.6
Transport, storage, and communication	169.3	190.2	7.1	12.3	2.1	6.1
Education	245.2	279.5	12.8	14.0	0.4	1.2
Health and social work	296.9	353.8	21.8	19.2	1.1	3.1
Other community, social & personal service activities	315.9	387.5	21.4	22.7	0.6	1.6

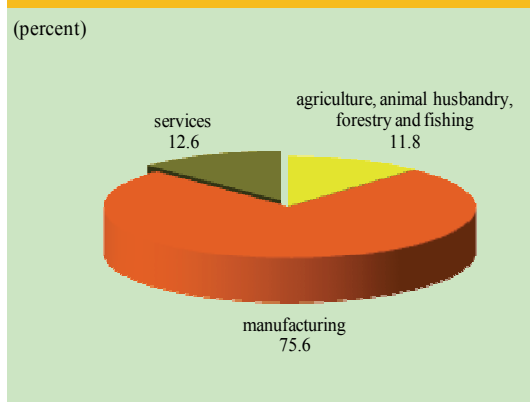
The price indices of "manufacturing", "agriculture, hunting, and forestry", "health and social work", and "transport, storage, and communication" groups, with a total relative weight of 94.4 percent, together accounted for 95.9 percent of the growth in general index.

The producer price index followed an upward trend during all months of 1390. The highest rise by 3.5 percent was related to the month of Farvardin and the lowest rise by 0.8 percent, to the months of Azar and Dey.

### Exportable Goods Price Index

Price index of "exportable goods" rose by 14.2 percent compared with the preceding year. This index grew by -6.8 and 11.0 percent in 1388 and 1389, respectively. Among the components of the price index of "exportable goods", "mineral products" with 21.1 percent growth, "base metals and articles of base metals" with 14.5 percent growth, and "products of the chemical or allied industries" with 25.4 percent growth, had the lion's share in raising the general index. Price index of "vegetable products" grew by 0.5 percent compared with the previous year. This index recorded negative growth of -13.6 percent in 1389.

**Figure 18.3. Contribution of special groups to the growth of PPI (general index) in 1390**



**Table 18.4. Annual Average Price Index of Exportable Goods**

(1383=100)

			Percentage change		Contribution to the growth of general index in 1390	
	1389	1390	1389	1390	Percentage point	Percent
Animal products	141.8	167.2	6.6	17.9	0.3	1.8
Vegetable products	248.8	250.1	-13.6	0.5	0.1	0.7
Animal and vegetable fats and oils	238.9	311.8	30.3	30.5	0.2	1.5
Prepared foodstuffs, beverages, and tobacco	202.5	233.5	5.9	15.3	0.4	3.2
Mineral products	265.4	321.4	25.0	21.1	5.2	36.4
Products of the chemical or allied industries	152.8	191.6	15.5	25.4	2.3	16.3
Plastic & articles thereof, rubber & articles thereof	135.6	156.7	6.3	15.6	0.4	2.7
Raw hides and skins, leather and articles thereof	181.7	270.8	53.5	49.0	0.6	4.5
Wood and articles of wood	173.2	175.7	0.8	1.4	*	*
Textiles and articles thereof	223.3	248.8	3.6	11.4	1.7	11.9
Footwear	169.1	230.7	29.7	36.5	0.2	1.5
Articles of stone	137.5	148.6	2.8	8.1	0.2	1.1
Base metals and articles of base metals	182.4	208.8	41.8	14.5	2.5	17.3
Mechanical appliances and electrical equipment	158.5	167.4	-0.4	5.6	0.1	0.9
Vehicles and transport equipment	138.8	140.6	5.5	1.3	*	0.2
Medical, precision, and optical instruments	151.5	152.3	-6.4	0.5	*	*
<b>General index</b>	<b>205.5</b>	<b>234.7</b>	<b>11.0</b>	<b>14.2</b>	<b>14.2</b>	<b>100.0</b>

**Total Return on Assets**

Comparison of the total return on assets (price movements+yields) with the inflation rate reveals that, in 1390, nominal value of US dollar (parallel market), nominal value of euro (parallel market), full Bahar Azadi gold coin price (old and new designs), were experiencing an increase higher than the inflation rate, while for other assets, the rate of return was lower than the inflation rate. Full Bahar Azadi gold coin price (new design), with 74.1 percent, and full Bahar Azadi gold coin price (old design), with 68.0 percent, had the highest growth rates in 1390. During 1388-1390, TEDPIX had the highest average rate of return on assets by 48.6 percent.

**Velocity of Circulation of Money**

Velocity of circulation of money was within the range of 6.2 to 7.0 and that of liquidity, within 1.6 to 1.8 during the course of 1388-1390. By definition, the velocity of circulation of notes and coins has a direct relationship with inflation. Moreover, change

in the composition of money and liquidity, due to improvement in banking services and expansion of electronic non-cash payment instruments, affects velocity of circulation of money and liquidity. In 1390, liquidity posted a growth of 20.1 percent, which was lower than the year before. In this year, the velocity of circulation of notes and coins, money, and liquidity was higher than 1389. In Esfand 1390, consumer price index of goods and services had 21.8 percent growth compared with the same month last year, higher than the corresponding figure of the previous year (19.9 percent).

**Table 18.6. Velocity of Circulation of Monetary Aggregates** (percent)

	1388▲	1389▲	1390
Notes and coins	20.2	21.1	23.7
Money	6.5	6.2	7.0
Liquidity	1.7	1.6	1.8
<b>CPI changes (1383=100) (compared with Esfand of the year before)</b>	<b>10.4</b>	<b>19.9</b>	<b>21.8</b>

**Table 18.5. Total Return on Assets (price movements+yields)** (1383=100) (percent)

	Growth during the year			Average rate of return <sup>1</sup>	Standard deviation	Sharpe ratio <sup>2</sup>
	1388	1389	1390			
Land price index (all urban areas)	-7.8	0.2	17.5	2.8	12.9	-1.1
TEDPIX	58.8	85.8	11.2	48.6	37.8	0.8
Rental value of non-owner occupied housing	12.8	6.0	11.1	9.9	3.5	-2.1
Nominal value of US dollar (parallel market)	3.2	6.2	28.0	12.0	13.5	-0.4
Nominal value of euro (parallel market)	2.5	-0.7	33.3	10.7	18.8	-0.4
Full Bahar Azadi gold coin price (old design)	6.5	41.8	68.0	36.4	30.9	0.6
Full Bahar Azadi gold coin price (new design)	17.6	34.6	74.1	40.2	29.0	0.8
Provisional profit rate of participation papers	16.0	16.0-17.0	20.0	17.5	2.2	0.0
Provisional profit rate of one-year term deposits (highest rate)	14.5	14.0	13.3	13.9	0.6	-5.7
Price index of Samand cars	1.1	0.9	-0.2	0.6	0.7	-24.1
Price index of Pride cars	-2.2	0.3	2.9	0.3	2.5	-6.8
<b>Consumer price index of goods and services</b>	<b>10.8</b>	<b>12.4</b>	<b>21.5</b>	<b>14.8</b>	<b>5.8</b>	<b>0</b>

<sup>1</sup> Average return on assets (except for participation papers and term deposits) is calculated using the geometric mean method.

<sup>2</sup> 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.