

PRICE TRENDS

n 1395, average Consumer Price Index (CPI) of goods and services in urban areas (base year: 1395)¹ and Producer Price Index (PPI) (base year: 1390) registered respectively 9.0 and 5.0 percent growth. A comparison of these figures with the respective figures in 1394 (11.9 and 4.9 percent) indicates a notable decline in CPI growth by 2.9 percentage points and a trivial rise in the growth rate of PPI.

Table 17.1. Annual Average Percentage Change in Price Indices

| | 1394 | 1395 |
|---|-------|------|
| Consumer price index (CPI) of goods and | | |
| services in urban areas (1395=100) | 11.9 | 9.0 |
| Producer price index (PPI) (1390=100) | 4.9 | 5.0 |
| Export price index (1390=100) | -16.0 | -2.7 |
| GDP deflator (1390=100) | 0.4 | 1.6 |
| Non-oil GDP deflator (1390=100) | 7.0 | 7.1 |

With the implementation of Subsidy Reform Plan as of late-Azar 1389, the upward trend of the CPI changes year-on-year (inflation rate) was accelerated and continued through the years 1390-1392. 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 to its highest level of 40.4 percent

in Mehr 1392. With the commencement of the 11th government, factors such as adjustment of inflationary expectations, stabilization of the exchange rate, strengthening of monetary discipline, and decline in international prices of commodities caused the inflation rate to decrease to 34.7 percent in 1392 and 15.6 percent in 1393. With the implementation of the JCPOA in 1394, this downward trend continued in the following years and inflation stood at the single-digit rate of 9.0 percent in 1395, after 26 years.

The PPI twelve-month changes hit a record high of 46.1 percent in Shahrivar 1392 (the highest in 17 years). Twelve-month changes of the PPI, with 19.7 percentage points fall compared with 1392 year-end, reached 14.8 percent at end-1393. PPI declined to 4.9 percent in 1394. This downward trend continued until month Aban of the year 1395 but stood at 5.0 percent at year-end, which was slightly higher than the respective figure at end-1394.

Consumer Price Index (CPI)

Urban Areas

Review of major components of the CPI in 1395 indicates that "medical care" had the highest growth rate by 16.7 percent and the lowest growth rate of 3.5 percent was related to "communication". Moreover, the inflation rate in all major groups, except for "tobacco" (with a small influence on inflation due

¹ In updating the relative weights of household expenditure on groups in CPI compilation, the base year of CPI was changed from 1390 to 1395.

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to its relative weight of only 0.4 percent), was lower compared with the year before.

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

CPI (1395=100)
PPI (1390=100)

PPI (1390=100)

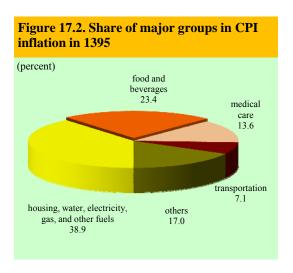
The major group of "housing, water, electricity, gas, and other fuels", with a relative weight of 37.1 percent in general CPI and a growth rate of 9.5 percent compared with the preceding year, had the lion's share of 38.9 percent in the growth of the general index in 1395.

After the major group of "housing, water, electricity, gas, and other fuels", growth in price index of "food and beverages" had the most direct effect on raising the general index. This group, with a relative weight of 25.5 percent in general index, grew by 8.2 percent and contributed by 23.4 percent to the growth in 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 62.3 percent of inflation in 1395.

Among the other major components of CPI, the price index of "medical care", with 16.7 percent growth compared with the year before, had 13.6 percent share in raising the general index."Transportation", with 7.1

percent growth compared with the year before, accounted for 7.1 percent of the rise in general CPI.

A review of CPI changes in each month of 1395 compared with the month before (monthly inflation) points to the fluctuating trend of this index. The highest growth by 2.1 percent was related to month Esfand and the lowest growth by 0.2 percent was related to Aban compared with the month before. Average monthly inflation of CPI stood at 0.9 percent in 1395.



Review of the developments in CPI by "tradable" and "non-tradable" special groups indicates that during 1391 and the first half of 1392, sharp increase in the exchange rate, resulting from the expansionary monetary 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 Shahrivar 1392. On the other hand, the price of non-tradable goods, due to being almost unaffected by exchange rate developments (most items in this group are servicesrelated), increased only slightly. With the commencement of the 11th government in 1392 which led to the strengthening of 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 stood at lower levels than the inflation of non-tradable goods as of the second half of 1393. In 1395, the average CPI of "tradable" and "non-tradable" special groups increased by 6.9 and 11.5 percent, respectively. Comparing these figures with the corresponding figures in 1394 (8.4 and 16.2 percent) indicates

lower growth compared with the previous year, especially for non-tradable goods.

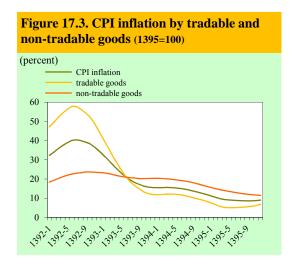
A review of CPI developments in urban areas by provinces reveals that Semnan and Gilan Provinces, with 11.8 and 10.5 percent growth in CPI compared with 1394, had the highest inflation rates. Qom and Fars Provinces, with 9.9 and 9.7 percent, were next. Kermanshah and Khorasan Razavi Provinces accounted for the lowest rates of inflation by 7.2 and 7.5 percent, respectively. Inflation rate was 9.3 percent in Tehran Province.

Table 17.2. Consumer Price Index in Urban Areas

(1395=100)

| | | | | Percentage change | | Direct effe growth o index i | f general n 1395 |
|---|------------------------------|------|-------|-------------------|------|------------------------------------|---------------------|
| | Relative weight in base year | 1394 | 1395 | 1394 | 1395 | Percentage point | Percent |
| Special groups | m ouse year | 157. | 1576 | 10). | 1570 | Point | 1 0100111 |
| Goods | 48.5 | 93.5 | 100.0 | 9.2 | 7.0 | 3.3 | 36.2 |
| Services | 51.6 | 89.4 | 100.0 | 15.9 | 11.8 | 5.7 | 63.8 |
| General index | 100.0 | 91.7 | 100.0 | 11.9 | 9.0 | 9.0 | 100.0 |
| Major groups and selected subgroups | | | | | | | |
| Food and beverages | 25.5 | 92.4 | 100.0 | 10.4 | 8.2 | 2.1 | 23.4 |
| Meat | 5.3 | 90.8 | 100.0 | 4.3 | 10.1 | 0.5 | 5.9 |
| Fish and seafood | 0.6 | 90.6 | 100.0 | 15.9 | 10.4 | 0.1 | 0.7 |
| Bread and cereals | 4.4 | 86.3 | 100.0 | 15.4 | 15.9 | 0.7 | 7.4 |
| Fats and oils | 0.8 | 93.8 | 100.0 | 3.3 | 6.6 | 0.1 | 0.6 |
| Fruits and nuts | 5.5 | 99.3 | 100.0 | 14.9 | 0.7 | 0.0 | 0.5 |
| Vegetables, pulses, and vegetable products | 3.5 | 96.7 | 100.0 | 6.3 | 3.4 | 0.1 | 1.4 |
| Dairy products and eggs | 3.0 | 94.8 | 100.0 | 9.3 | 5.5 | 0.2 | 1.9 |
| Tobacco | 0.4 | 90.9 | 100.0 | -3.1 | 10.0 | 0.0 | 0.4 |
| Housing, water, electricity, gas, and other fuels | 37.1 | 91.3 | 100.0 | 12.3 | 9.5 | 3.5 | 38.9 |
| Rental value of non-owner occupied housing | 7.7 | 91.1 | 100.0 | 12.5 | 9.8 | 0.8 | 8.3 |
| Imputed rental value of owner-occupied housing | 25.4 | 90.8 | 100.0 | 12.7 | 10.1 | 2.5 | 28.3 |
| Maintenance and repair services | 1.7 | 91.6 | 100.0 | 12.9 | 9.2 | 0.2 | 1.7 |
| Water | 0.5 | 93.8 | 100.0 | 11.6 | 6.6 | 0.0 | 0.4 |
| Electricity, gas, and other fuels | 1.8 | 98.5 | 100.0 | 4.7 | 1.5 | 0.0 | 0.3 |
| Clothing and footwear | 4.6 | 93.8 | 100.0 | 10.4 | 6.6 | 0.3 | 3.5 |
| Furnishings, household equipment, and | | | | | | | |
| routine household maintenance | 4.3 | 95.1 | 100.0 | 5.7 | 5.2 | 0.2 | 2.6 |
| Transportation | 8.9 | 93.4 | 100.0 | 11.1 | 7.1 | 0.6 | 7.1 |
| Communication | 2.3 | 96.6 | 100.0 | 3.6 | 3.5 | 0.1 | 0.9 |
| Medical care | 7.8 | 85.7 | 100.0 | 23.8 | 16.7 | 1.2 | 13.6 |
| Recreation and culture | 2.1 | 92.1 | 100.0 | 14.9 | 8.6 | 0.2 | 2.0 |
| Education | 2.0 | 86.2 | 100.0 | 16.4 | 16.0 | 0.3 | 3.4 |
| Restaurants and hotels | 1.8 | 91.4 | 100.0 | 16.2 | 9.5 | 0.2 | 1.9 |
| Miscellaneous goods and services | 3.2 | 91.2 | 100.0 | 11.1 | 9.7 | 0.3 | 3.4 |

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



Rural Areas 1

CPI for rural areas went up by 7.2 percent compared with the year before. Inflation in rural areas was the result of growth in the price index of "goods" with 7.0 percent and that of "services" with 7.8 percent compared with 1394. "Goods", with a relative weight of 68.84 percent in the general index, and "services", with a relative

weight of 31.16 percent, raised the general index by respectively 66.0 and 34.0 percent.

Producer Price Index (PPI)

In 1395, Producer Price Index (PPI) rose by 5.0 percent compared with 1394. The growth rate of this index was 14.8 percent in 1393 and 4.9 percent in 1394 (base year: 1390). Among the major components of PPI, "manufacturing" and "health and social work" groups made the greatest contribution to raising the PPI (general index) by 35.5 and 23.6 percent, respectively.

The price index of "manufacturing" group showed 3.6 percent growth in 1395, mainly attributable to the rise in the price indices of "chemical products" and "base metals" by 4.7 and 5.5 percent, respectively (considering their relative weight in the price index of "manufacturing"). The price index of "agriculture, forestry, and fishing" group, with a relative weight of 17.1 percent in the general index and a growth rate of 2.4 percent, made a contribution of 9.3 percent to the growth of the general index.

Table 17.3. Producer Price Index

(1390=100)

| | | | Percentage change | | Direct effect growth of index ir | general | |
|---|-----------|-------|-------------------|------|--|------------|---------|
| | weight in | | | | | Percentage | |
| | base year | 1394 | 1395 | 1394 | 1395 | point | Percent |
| General index | 100.0 | 214.5 | 225.2 | 4.9 | 5.0 | 5.0 | 100.0 |
| Major groups | | | | | | | |
| Agriculture, forestry, and fishing | 17.1 | 240.3 | 246.1 | 5.7 | 2.4 | 0.5 | 9.3 |
| Manufacturing | 52.0 | 203.0 | 210.3 | -0.4 | 3.6 | 1.8 | 35.5 |
| Transport and storage | 18.5 | 213.8 | 222.3 | 8.7 | 4.0 | 0.7 | 14.9 |
| Communication | 2.0 | 139.8 | 148.6 | 8.2 | 6.3 | 0.1 | 1.8 |
| Hotels and restaurants | 0.9 | 258.2 | 286.5 | 18.1 | 11.0 | 0.1 | 2.4 |
| Education | 3.8 | 172.9 | 200.9 | 17.0 | 16.2 | 0.5 | 10.0 |
| Health and social work | 4.8 | 297.3 | 349.3 | 27.8 | 17.5 | 1.2 | 23.6 |
| Other community, social and personal service activities | 0.8 | 271.6 | 306.2 | 22.7 | 12.7 | 0.1 | 2.5 |
| Special groups | | | | | | | |
| Services | 30.9 | 219.6 | 238.6 | 13.8 | 8.7 | 2.7 | 55.2 |

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

¹ Source: "Consumer Price Index of Goods and Services in Rural Areas" published by the SCI (base year: 1395).

Reviewing the monthly changes of Producer Price Index (monthly inflation) indicates that the highest rate of inflation by 2.0 percent was related to month Azar and the lowest by 0.2 percent, to Bahman. The average monthly inflation of the PPI reached 0.7 percent in 1395, higher than the average rate of the previous year (0.3 percent).

Export Price Index

Export price index is used in Iran to show the change in the general price level of nonoil exportables. For compilation of this index, the price of exportable goods in foreign currency is converted into 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.

Export price index fell by 2.7 percent compared with the preceding year. This index grew by -0.5 percent in 1393 and -16.0 percent in 1394. Among the components of this index, "mineral products" with 8.2 percent fall and "vegetable products", with 6.0 percent reduction (considering their relative weight in the export price index) had the biggest impact on the decline of this index. "Products of the chemical or allied industries" and "base metals and articles of base metals" groups experienced 1.2 and 3.4 percent decrease, respectively.

Table 17.4. Export Price Index

(1390=100)

| | | | | | ntage nge | Direct effe growth o index i | f general |
|---|------------------------------|-------|-------|-------|--------------|------------------------------------|----------------------|
| | Relative weight in base year | 1394 | 1395 | 1394 | 1395 | Percentage point | Percent ² |
| General index | 100.0 | 228.3 | 222.2 | -16.0 | -2.7 | -2.7 | -100.0 |
| Animal products | 2.4 | 287.4 | 312.4 | 0.7 | 8.7 | 0.3 | 10.8 |
| Vegetable products | 10.4 | 292.5 | 275.1 | 6.7 | -6.0 | -0.8 | -28.9 |
| Animal or vegetable fats and oils | 0.4 | 308.4 | 339.1 | 3.3 | 10.0 | 0.0 | 1.8 |
| Prepared foodstuffs, beverages, and tobacco | 3.7 | 306.4 | 327.8 | 2.3 | 7.0 | 0.3 | 13.7 |
| Mineral products | 31.8 | 183.7 | 168.7 | -35.8 | -8.2 | -2.1 | -77.0 |
| Products of the chemical or allied industries | 20.1 | 211.1 | 208.6 | -15.5 | -1.2 | -0.2 | -8.2 |
| Plastic & articles thereof, rubber & articles thereof | 10.5 | 276.6 | 268.6 | -9.0 | -2.9 | -0.4 | -13.8 |
| Raw hides and skins, leather and articles thereof | 0.6 | 139.4 | 129.8 | -34.4 | -6.9 | * | -0.9 |
| Wood and articles of wood | 0.1 | 272.8 | 280.4 | 0.2 | 2.8 | * | 0.1 |
| Textiles and articles thereof | 3.6 | 260.2 | 275.1 | 11.4 | 5.7 | 0.2 | 8.8 |
| Footwear | 0.5 | 380.8 | 394.9 | 3.9 | 3.7 | * | 1.1 |
| Articles of stone | 2.1 | 243.5 | 240.0 | -2.2 | -1.4 | * | -1.2 |
| Base metals and articles of base metals | 9.7 | 212.7 | 205.4 | -14.1 | -3.4 | -0.3 | -11.3 |
| Mechanical appliances and electrical equipment | 3.0 | 239.5 | 250.4 | -1.7 | 4.5 | 0.1 | 5.6 |
| Vehicles and transport equipment | 1.2 | 271.5 | 267.9 | 9.9 | -1.3 | * | -0.6 |
| Special groups | | | | | | | |
| Petrochemical products | 46.3 | 205.1 | 196.4 | -27.1 | -4.2 | -1.8 | -66.1 |

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

² Indicates the share of each group in the changes of the general index.

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Total Return on Assets

Comparison of the total return on assets (price movements + yields) with the inflation rate in 1395 reveals that the growth rates of "full Bahar Azadi gold coin price (new design)", "provisional profit rate of participation papers issued by government", "provisional profit rate of one-year deposits", and "rental value of non-owner occupied housing", by respectively 19.0, 17.5, 15.0, and 9.8 percent, were higher than the inflation rate (9.0 percent). "Price of residential units in Tehran per square meter", "nominal value of euro in the parallel market", and "nominal value of US dollar in the parallel market" experienced growth rates of respectively 6.4, 5.7, and 5.6 percent. "TEPIX", with a growth rate of -3.7 percent, was the only asset with a negative return. During 1393-1395, except for "nominal value of euro in the parallel market" and "TEPIX", which had the lowest average rates of return on assets by respectively -1.8 and -0.8 percent, the average rates of return on other assets were positive, with "provisional profit rate of participation papers issued by government" and "provisional profit rate of one-year deposits" enjoying the highest rates of return by 20.1 and 19.0 percent, respectively.

Circulation Velocity of Monetary Aggregates

Circulation velocity of M1 was within the range of 7.8 to 9.3 times and that of M2, within 1.0 to 1.4 times in the Iranian economy during the course of 1393-1395. The nominal GDP growth was -1.2 percent in 1394 and 14.3 percent in 1395 and M2 growth was 30.0 percent in 1394 and 23.2 percent in 1395. Circulation velocity of notes and coins increased in this year compared with 1394 while that of money decreased.

Table 17.6. Circulation Velocity of Monetary Aggregates

| Monetary Aggregates | | | (times) |
|------------------------------|------|------|---------|
| | 1393 | 1394 | 1395 |
| Notes and coins | 32.0 | 29.9 | 32.3 |
| M1 | 9.3 | 8.1 | 7.8 |
| M2 | 1.4 | 1.1 | 1.0 |
| Quasi-money | 1.7 | 1.3 | 1.2 |
| Nominal GDP growth (percent) | 14.4 | -1.2 | 14.3 |

Table 17.5. Total Return on Assets (price movements+yields)

(percent)

| | Growth during the year | | | _Average rate Standard | | Sharpe |
|---|------------------------|------|----------|------------------------|-----------|--------------------|
| | 1393 | 1394 | 1395 | of return 1 | deviation | Ratio ² |
| Price of residential units in Tehran (per square meter) ³ | 5.0 | 2.3 | 6.4 | 4.5 | 2.1 | -7.4 |
| TEPIX | -20.9 | 28.3 | -3.7 | -0.8 | 25.0 | -0.8 |
| Rental value of non-owner occupied housing | 15.6 | 12.5 | 9.8 | 12.6 | 2.9 | -2.6 |
| Nominal value of US dollar (parallel market) | 3.0 | 5.2 | 5.6 | 4.6 | 1.4 | -11.1 |
| Nominal value of euro (parallel market) | -1.5 | -9.0 | 5.7 | -1.8 | 7.3 | -3.0 |
| Full Bahar Azadi gold coin price (new design) | -9.0 | -3.3 | 19.0 | 1.6 | 14.8 | -1.3 |
| Provisional profit rate of participation papers issued by government ⁴ | 22.0 | 20.8 | 17.5 | 20.1 | 2.3 | 0.0 |
| Provisional profit rate of one-year deposits (approved) | 22.0 | 20.0 | 15.0 | 19.0 | 3.6 | -0.3 |
| Consumer price index of goods and services | | | <u> </u> | | | |
| (1395=100) (inflation rate) | 15.6 | 11.9 | 9.0 | 12.1 | 3.3 | -2.4 |

¹ The average rate of return on assets (except for participation papers and term investment deposits) is calculated using the geometric mean method over 1393-1395.

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: SCL

⁴ The profit rate of participation papers was calculated for the papers at their first issuance date.

5th Five-Year Development Plan (1390-1395)

Inflation targeting is not explicitly spelled out as a strategy framework for monetary policy design and implementation within the 5th FYDP documents. However, as this plan is an integral element of the 20-Year Vision Document, with great emphasis on inflation control and increase in low-income groups' purchasing power, the 5th Plan is expected to address these two issues expressly. On this basis, the 5th FYDP has expeditiously described and expounded objectives for filling up the gap between high and low income deciles, subsidy and compensation policies, as well as on CPI and inflation targets.

The average inflation rate during the 5th Plan period was 20.2 percent, higher than the respective figure during the 4th FYDP (15.2 percent). Reviewing the developments of this variable over the 1390-1395 period indicates that due to the implementation of Targeted Subsidy Plan in late-Azar 1389, inflation rate reached 21.5 percent in 1390. In 1391, inflationary pressures, emanating from the expansionary monetary policies of previous years, rise in the exchange rate, and imposition of severe economic sanctions, led to an unprecedented rise in inflation. The rate of inflation reached 30.5 percent in 1391. Continuation of inflationary pressures protracted the mentioned upward trend up until the year 1392 when the inflation rate reached 40.4 percent in month Mehr. After the 11th government took office, inflation expectations started to recede and with the

stabilization of the foreign exchange market, strengthening of the monetary discipline, and fall in international commodity prices, inflation rate decreased to 15.6 percent at end-1393. With a more appropriate environment, along with the implementation of the JCPOA which in turn led to the improvement of Iran's international relations, inflation rate started a decreasing trend and recorded the single-digit rate of 9.0 percent in 1395, after 26 years.

Over the years of the 5th FYDP, PPI increased from 100.0 in 1390 (base year: 1390) to 225.2 in 1395. The annual average growth rate of this index over the 1390-1395 period was 20.2 percent. The development of this index was on a soaring trend over the 1390-1392 period and reversed during the 1393-1395 period so that the PPI rise could stand at 5.0 percent at end-1395.

Export price index experienced sharp fluctuations over the course of the 5th Plan. This index had an upward trend during the 1390-1392 period, as the exchange rate surged remarkably whereas over the 1393-1395 period, the export price index, considering the relative stability in the foreign exchange market, started to fall. The growth rate of this index, which had increased noticeably from 14.2 percent in 1390 to 124.1 percent in 1391, declined sharply by 2.7 percent in 1395. The annual average growth rate of the export price index was 16.8 percent over the course of the 5th FYDP.

Table 17.7. Developments of Price Indices during the 5th FYDP

| | | 1389 | 1389 Year | | | | | 5 th Plan | |
|--------------------|-------------------------------|-------------|-----------|-------|-------|-------|-------|----------------------|---------|
| | | (base year) | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | average |
| CPI in urban areas | General index | 33.2 | 40.3 | 52.6 | 70.9 | 81.9 | 91.7 | 100.0 | - |
| (1395=100) | Percentage change (inflation) | 12.4 | 21.5 | 30.5 | 34.7 | 15.6 | 11.9 | 9.0 | 20.2 |
| DDI (1200-100) | General index | 74.5 | 100.0 | 132.4 | 178.1 | 204.5 | 214.5 | 225.2 | - |
| PPI (1390=100) | Percentage change (inflation) | 16.6 | 34.2 | 32.4 | 34.5 | 14.8 | 4.9 | 5.0 | 20.2 |
| Export price index | General index | 87.6 | 100.0 | 224.1 | 273.0 | 271.7 | 228.3 | 222.2 | - |
| (1390=100) | Percentage change (inflation) | 11.0 | 14.2 | 124.1 | 21.8 | -0.5 | -16.0 | -2.7 | 16.8 |