

The average consumer price index (CPI) (base year=1383) grew by 18.4 percent in 1386 and wholesale price index (WPI) and producer price index (PPI) (base year=1376) increased by 14.9 and 16.8 percent, respectively. Comparing these figures with the corresponding figures of the previous year (11.9, 12.1, and 12.2 percent) indicates that these three indices posted an increase in this year.

In 1386, despite administrative price controls on some goods and services and the sharp rise in the imports of consumer goods, inflation rate had an upward trend and reached 18.4 percent. This is indicative of a deviation from the target set in the 4th FYDP at 9.1 percent. This was mainly witnessed in households' essential goods and consumer durables. High liquidity growth, implementation of expansionary monetary policy and off-budgetary withdrawals from the OSF for government current expenditures are among main factors leading to an increase in inflation.

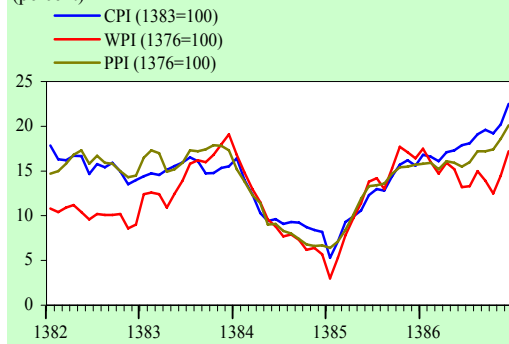
The analysis of the binary relation among the three price indices reveals a high correlation between the changes in monthly figures. During 1379-86, the binary correlation coefficient between changes in the consumer price index and wholesale price index was 0.61 percent, between consumer price index and producer price index 0.83 percent, and between wholesale price index and producer price index 0.86 percent.

Annual Average Changes in Price Indices (percent)

	1385	1386
Consumer price index in urban areas	11.9	18.4
Wholesale price index	12.1	14.9
Producer price index	12.2	16.8
Exported goods price index	17.4	16.3
GDP deflator (basic price)	14.3	19.9
Non-oil GDP deflator (basic price)	15.5	17.9

Figure 17.1. Changes of CPI, WPI and PPI

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



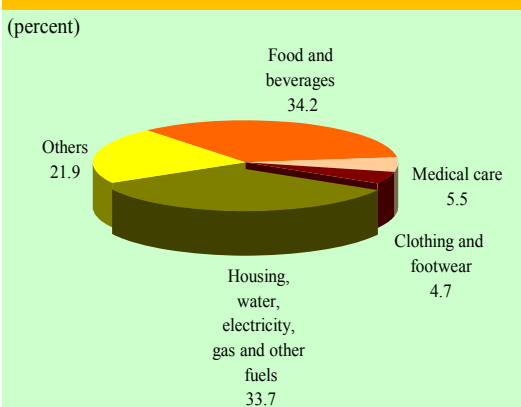
Consumer Price Index (CPI)

Urban Areas

Review of the main constituents of the CPI indicates that the price indices of all groups, except for "communication", have increased. Among the main groups, "tobacco" had the highest and "communication" the lowest growth. Meanwhile, most minor groups experienced a remarkable growth in this year.

In 1386, the main group of "food and beverages", with a relative weight of 28.49 percent and a growth rate of 21.7 percent, had the highest share in raising the general index by 34.2 percent. This was mainly attributable to a remarkable 26.2 percent growth of "fruit and nut", against 9.3 percent of the previous year, which in turn was due to a rise in the price indices of "citrus" and "fruits other than citrus" by 35.1 and 26.6 percent, respectively, compared with the previous year. "Meat", with 20.2 percent growth compared with the year before, ranked second in raising the "food and beverages" index.

Figure 17.2. Contribution of main groups to CPI changes in 1386



After "food and beverages", "housing, water, electricity, gas, and other fuels", with a relative weight of 28.60 percent, ranked next. This main group grew by 21.2 percent compared with the previous year and had 6.2 percentage points contribution to raising the general index. This was mainly ascribable to the rise in the price index of "rental equivalence of owner-occupied houses" by 20.9 percent, which accounted for 66.7 percent of the increase in the price index of "housing, water, electricity, gas, and other fuels" and 22.4 percent of the rise in the general index. Therefore, the two main groups of "food and beverages" and "housing, water, electricity, gas, and other fuels", with a total

relative weight of 57.1 percent, had a share of 67.9 percent in the inflation rate for 1386.

Among other main constituents of the CPI, the price index of "transportation", with 13.5 percent growth compared with the previous year, raised the general index by 1.5 percentage points. In "transportation" group, the price index of "travel expenses" subgroup grew by 21.4 percent and accounted for 45 percent of the rise in the general index.

The growth rate for the price index of "medical care" rose from 13.8 percent in 1385 to 17 percent in the review year. The main reason behind this increase was the rise in "medical, dental, and paramedical services" subgroup by 18.1 percent, which had a relative weight of 60.4 percent in "medical care".

Review of CPI developments in urban areas by provinces reveals that Ilam Province, with 21.7 percent, and Hamedan and South Khorasan provinces, each with 20.8 percent, had the highest rate of inflation. The lowest rate of inflation at 14.9 percent was related to Semnan Province. Meanwhile, in terms of the general level of prices, Booshehr and Ilam provinces experienced the lowest and the highest levels, respectively, in 1386.

The analysis of CPI during 1383-86 indicates that Sistan and Baluchestan and Ilam provinces, with inflation rates of 12.4 and 16.2 percent, had the slowest and the fastest growth pace in the general level of prices, respectively. Average inflation rate in all urban areas was 13.9 percent during the mentioned period.

Inflation rate was 19.2 percent in Tehran Province which, due to its population and share in the expenditures of urban households, made a remarkable contribution of 33.05 percent to the general index. Increase in CPI in Tehran Province had a share of 6.2 percentage points in CPI's general index of all urban areas, constituting 33.5 percent of the rise in the general index. Esfahan

Province, with 8 percent share, and Khorasan Razavi and Fars provinces, with 6 percent, ranked second and third in the increase of CPI in all urban areas, respectively.

Rural Areas

CPI for rural areas increased by 17.1 percent in 1386 compared with the previous year. Inflation in rural areas is a result of growth in the price index of "goods" with 18.2 percent and "services" with 14.3 percent, compared with the previous year. These two special groups, with relative weights of 76.3 and 23.7 percent in the general index, raised the general index by 77.7 and 22.3 percent, respectively.

In the review year, the price index of "food, beverages, and tobacco" advanced 22.5 percent compared with the previous year, mainly attributable to the rise in the price

indices of "bread and cereals", "red meat, poultry, and their products", and "vegetables and pulses". The shares of "food, beverages, and tobacco" and "non-edible goods and services" in the rise of the general index were 56.5 and 43.5 percent, respectively.

Ranking next after "food, beverages, and tobacco" and "housing, water, electricity, gas, and other fuels", "transportation", with 7.3 percent, "medical care", with 5.9 percent, and "clothing and footwear", with 5.4 percent, had the highest shares in raising the general index. The five mentioned groups together accounted for 88.8 percent of the rise in the general index.

Wholesale Price Index (WPI)

Wholesale price index of goods increased by 14.9 percent in 1386. Considering the relative weights of major groups,

Annual Average Consumer Price Index in Urban Areas (1383=100)

			Percentage change		Contribution to the growth of general index in 1386	
	1385	1386	1385	1386	Percentage point	Percent
Special groups						
Goods	119.3	140.0	9.9	17.4	9.6	52.0
Services	129.0	154.5	14.5	19.8	8.8	48.0
Housing, water, electricity, gas, and other fuels	126.6	153.4	13.4	21.2	6.2	33.7
General index	123.5	146.2	11.9	18.4	18.4	100.0
Main and selected minor groups						
Food and beverages	125.6	152.8	13.1	21.7	6.3	34.2
Meat	118.9	142.9	13.5	20.2	1.3	7.1
Fish and seafood	127.3	153.6	14.2	20.6	0.2	0.9
Bread and cereals	121.3	148.0	8.8	22.1	1.0	5.4
Fats and oils	117.6	156.8	8.2	33.4	0.3	1.7
Fruit and nut	128.3	161.8	9.3	26.2	1.4	7.8
Vegetables, pulses, and vegetable products	146.7	173.2	25.5	18.0	0.8	4.5
Dairy products and eggs	119.3	144.0	13.7	20.7	0.7	3.8
Tobacco	114.8	140.7	8.6	22.6	0.1	0.6
Housing, water, electricity, gas, and other fuels	126.6	153.4	13.4	21.2	6.2	33.7
Rent of residential houses	126.9	153.9	13.7	21.2	1.3	6.9
Rental equivalence of owner-occupied houses	127.4	154.1	13.9	20.9	4.1	22.4
Maintenance and repair services	140.1	182.9	18.6	30.6	0.6	3.4
Water	102.9	114.0	0.3	10.8	0	0.2
Electricity, gas, and other fuels	104.6	116.3	1.9	11.2	0.2	0.8
Clothing and footwear	117.5	134.8	8.4	14.7	0.9	4.7
Furnishings, household equipment, and routine household maintenance	124.6	144.6	11.4	16.1	1.0	5.5
Transportation	111.6	126.7	6.7	13.5	1.5	8.0
Communication	97.3	97.1	-0.8	-0.2	0	0
Medical care	131.7	154.1	13.8	17.0	1.0	5.5
Recreation and culture	112.0	121.2	5.7	8.2	0.3	1.5
Education	143.4	163.5	20.8	14.0	0.3	1.8
Restaurants and hotels	124.4	145.6	11.4	17.0	0.3	1.6
Miscellaneous goods and services	127.8	148.7	15.1	16.4	0.5	2.9

this increase was mainly due to the fact that the price index of "domestically produced and consumed goods" rose to 15.2 percent, against 12.1 percent in the previous year, constituting 76.6 percent of changes in the WPI.

The growth rate of the price index of "exported goods" decreased from 17.6 percent in 1385 to 17.0 percent in the review year; however, that of "imported goods" increased from 10.1 percent in the previous year to 12.9 percent in 1386.

Of factors affecting the price index of imported goods are international prices, import duties, and the exchange rate used in Customs calculations. The effective rate of import duties ⁽¹⁾ rose from 10.4 percent in 1385 to 10.8 percent in 1386. The exchange parity rate applied in Customs calculations was Rs. 9,324 on average per one US dollar. The corresponding figure of the previous year was Rs. 9,194. Considering the unification of exchange rate in 1381 and its adjustment by 1.4 percent in 1386 compared with the previous year, increase in the price index of imported goods was largely attributable to the rise in international prices, changes in the composition of imported goods, and increase in the effective rate of import duties and exchange rate.

The unit value index ⁽²⁾ for exported goods was Rs. 4.49 million per ton in 1386 compared with Rs. 4.28 million per ton in 1385, up by 4.9 percent. For imported goods, this index also increased by 21.4 percent, from Rs. 8.82 million to Rs. 10.71 million. The unit value indices of exported and imported goods are influenced by a host of factors, inter alia; internal and external inflation, foreign exchange rate, the effective rate of import duties, and the quality and type of imported and exported goods.

(1) It results from division of sum of the import duties received by the rial value of total imports.

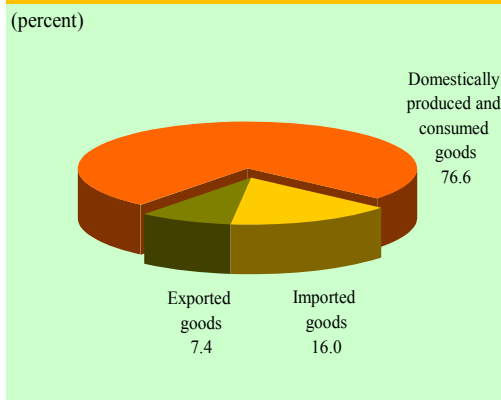
(2) Value of exported or imported goods divided by their weight

Among the main groups of the WPI, "foodstuffs", with 16.4 percent growth and a relative weight of 35.4 percent in the general index, accounted for 44.9 percent of the changes in the general index. Ranking next is "manufactured goods according to raw materials", with a growth rate of 16.8 percent and a relative weight of 26.9 percent, constituting 30.6 percent of the rise in the general index.

In 1386, a relatively sharp rise in the price of some petroleum products such as gasoline by 20.8 percent and industrial engine oil by 7.7 to 21.6 percent, along with stability in the price index of other petroleum products such as kerosene and gas oil led to an average price rise of "mineral fuels and their products" group, at 11.6 percent, well above 1384 and 1385 figures of 4.7 and 2.7 percent, respectively.

In 1386, average price index of "building materials" accounted for the highest increase among the main and special groups by 19 percent. This was mainly due to the rise in the price index of "metallic building materials" by 22.4 percent. The price index of "nonmetallic building materials" went up from 6.3 percent in 1385 to 14.1 percent in the review year.

Figure 17.3. Contribution of major groups to WPI changes in 1386



Annual Average Wholesale Price Index (1376=100)

	1385	1386	Percentage change		Contribution to the growth of general index in 1386	
			1385	1386	Percentage point	Percent
Major groups						
Domestically produced and consumed goods	311.1	358.3	12.1	15.2	11.4	76.6
Imported goods	224.8	253.8	10.1	12.9	2.4	16.0
Exported goods	483.3	565.6	17.6	17.0	1.1	7.4
General index	297.0	341.2	12.1	14.9	14.9	100.0
Main groups						
Foodstuffs	342.2	398.3	12.5	16.4	6.7	44.9
Beverages and tobacco	293.9	319.7	6.4	8.8	0.1	0.5
Industrial materials (except mineral fuels)	257.6	295.1	14.7	14.6	0.5	3.3
Mineral fuels and their products	499.5	557.3	2.7	11.6	0.5	3.6
Chemicals and petrochemicals	312.4	353.9	11.0	13.3	1.2	8.1
Manufactured goods according to raw materials	299.3	349.6	16.1	16.8	4.6	30.6
Machinery and transport equipment	196.9	215.4	7.9	9.4	1.2	8.1
Miscellaneous goods	182.4	200.0	3.5	9.6	0.1	0.9
Special groups						
Agricultural, animal husbandry & fishing products	353.9	411.3	13.9	16.2	5.2	34.8
Agriculture	364.5	421.0	15.2	15.5	3.2	21.5
Animal husbandry and fishing	336.1	394.8	11.8	17.5	2.0	13.3
Building materials	342.3	407.3	19.9	19.0	2.4	15.8
Metallic	346.3	423.9	31.8	22.4	1.7	11.0
Nonmetallic	336.8	384.3	6.3	14.1	0.7	4.8

Producer Price Index (PPI)

Producer price index (PPI) advanced 16.8 percent compared with the previous year. The growth rates of this index were 9.5 and 12.2 percent in 1384 and 1385, respectively. Among the main constituents of the PPI, "manufacturing", "agriculture, animal husbandry and forestry", "real estate, renting, and business activities", and "transport, storage, and communications" groups made the biggest

contribution to raising the general index. The price index of "manufacturing" group, with a relative weight of 45.2 percent in the general index and a growth rate of 15.4 percent, raised the PPI by 35.3 percent. Reviewing the monthly changes of the producer price index reveals that this index followed an upward trend in all months. The highest increase was in Tir by 2.4 percent.

Annual Average Producer Price Index (1376=100)

	1385	1386	Percentage change		Contribution to the growth of general index in 1386	
			1385	1386	Percentage point	Percent
Special groups						
Agriculture, animal husbandry, forestry, and fishing	353.5	420.7	13.1	19.0	4.5	26.7
Mining and quarrying, manufacturing, and electricity, gas, and water supply	302.5	347.3	11.3	14.8	6.1	36.1
Services	441.3	518.9	12.6	17.6	6.2	37.2
General index	354.0	413.5	12.2	16.8	16.8	100.0
Main groups						
Agriculture, animal husbandry, and forestry	352.6	420.6	13.3	19.3	4.4	26.5
Fishing	404.0	429.3	4.9	6.3	0	0.2
Mining and quarrying	268.1	288.4	34.9	7.6	0.1	0.3
Manufacturing	302.6	349.2	11.5	15.4	5.9	35.3
Electricity, gas, and water supply	317.7	332.5	0	4.7	0.1	0.4
Repairing of motor vehicles	376.5	433.9	16.2	15.2	0.1	0.3
Hotels and restaurants	425.6	503.6	12.6	18.3	0.2	1.0
Transport, storage, and communications	376.1	432.4	9.9	15.0	1.7	10.0
Financial intermediations	845.6	886.6	-0.4	4.8	0.1	0.9
Real estate, renting, and business activities	441.4	538.9	16.0	22.1	3.1	18.3
Education	605.4	700.1	22.5	15.6	0.1	0.9
Health and social work	498.3	605.7	18.1	21.6	0.7	4.1
Other community, social & personal services activities	453.5	516.4	11.9	13.9	0.3	1.8

Exported Goods Price Index

Price index of "exported goods" rose by 16.3 percent compared with the previous year, up from 16.2 percent in 1384 and down from 17.4 percent in 1385. Among the constituents of the price index of "exported goods", the price index of "mineral products", with 22.6

percent growth, had the largest contribution to the growth of general index by 35.5 percent, mainly attributable to the increase in the price indices of most items in this group. Among main groups, the highest increase by 94 percent belonged to "wood and articles of wood".

Annual Average Index of Exported Goods (1376=100)

	1385	1386	Percentage change		Contribution to the growth of general index in 1386	
			1385	1386	Percentage point	Percent
Animal products	547.8	594.4	4.8	8.5	0.2	1.1
Vegetable products	292.7	331.8	1.9	13.4	0.9	5.7
Animal and vegetable fats and oils	272.4	393.6	7.4	44.5	0.1	0.7
Prepared foodstuffs, beverages, and tobacco	442.4	491.4	15.5	11.1	0.9	5.6
Mineral products	1,271.1	1,558.5	25.1	22.6	5.8	35.5
Products of the chemical or allied industries	514.0	614.8	15.8	19.6	3.3	20.0
Plastic & articles thereof, rubber & articles thereof	346.8	357.4	5.8	3.1	0.1	0.5
Raw hides and skins, leather, and articles thereof	363.1	470.2	-3.4	29.5	0.8	4.8
Wood and articles of wood	325.2	630.9	12.2	94.0	0.2	1.2
Pulp of wood, paper, and paperboard	278.6	278.6	0	0	0	0
Textiles and articles thereof	286.9	319.0	17.0	11.2	1.9	11.4
Footwear	311.2	312.4	2.5	0.4	0	0
Articles of stone	296.4	321.9	6.6	8.6	0.1	0.5
Base metals and articles of base metals	669.8	757.3	30.3	13.1	1.8	11.0
Mechanical appliances and electrical equipment	520.1	661.9	67.8	27.3	0.2	1.3
Vehicles and transport equipment	198.4	209.0	1.4	5.3	0	0.2
Optical, precision, and medical instruments	350.5	418.3	0.6	19.3	0.1	0.7
General index	481.1	559.5	17.4	16.3	16.3	100.0

Price Trends and Rate of Return on Assets

A comparison of the rate of return on assets with the inflation rate indicates that, in 1386, the growth of "land price" and "rent of residential houses" indices was higher than the inflation rate and real rate of return on other assets was negative. Investors in the construction and housing sector gained the highest return on "land price" and "rent of residential houses" indices, which increased by 53.3 and 21.2 percent, respectively.

Velocity of Circulation of Money

Velocity of circulation of money during the course of 1382-86 was within the range of 5.2 to 5.8 and that of liquidity between 1.8 and 2.1. By definition, there exists a direct relationship between velocity of circula-

tion of money and inflation. Moreover, change in the composition of money and liquidity, due to improvements in banking services and the expansion of electronic and non-cash payment instruments, impacts on money velocity. During 1384-86, consumer price index of goods and services grew by 8.2, 15.6, and 22.5 percent year-on-year. In 1386, liquidity recorded 27.7 percent growth. Despite a lower liquidity growth compared with the previous year, CPI experienced a higher increase in 1386. Moreover, the velocity of circulation of notes and coins as well as money declined and that of liquidity remained relatively unchanged. This points to a divergence between the growth rate of liquidity and inflation (growth in CPI) during the recent years.

Price Trends and Rate of Return on Assets (percent)

	1382▲	1383▲	1384▲	1385▲	1386	Average rate of return ⁽¹⁾	Standard deviation	Sharpe ratio ⁽²⁾
US dollar (parallel market)	3.8	5.1	3.4	2.0	1.4	3.1	1.5	-8.9
Price index of Pride automobiles ⁽³⁾	0.9	2.2	4.3	2.4	1.7	-8.0
Euro (parallel market)	23.1	13.1	0.6	7.0	11.6	10.8	8.3	-0.6
Government participation papers	17.0	17.0	15.5-17	15.5	15.5	16.3	0.8	0.2
Full Bahar Azadi gold coins (old design)	23.2	21.3	17.6	36.7	13.5	22.2	8.8	0.7
CBI participation papers	17.0	17.0	15.5	15.5	15.5	16.1	0.8	0
Price and cash dividend index	138.6	13.6	-12.7	14.7	17.6	26.1	59.6	0.2
Rent of residential houses index ⁽³⁾	11.6	13.7	21.2	15.4	5.1	-0.1
Land price index ⁽³⁾	36.2	22.0	11.5	12.8	53.3	26.2	17.6	0.6
Provisional profit on one-year investment deposits in public banks (highest rate)	13.0	13.0	13.0	16.0	16.0	14.2	1.6	-1.2
Provisional profit on one-year investment deposits in private banks (highest rate)	17.0	18.0	18.0	17.5	17.5	17.6	0.4	3.6
Consumer price index of goods and services (annual average)	15.6	15.2	10.4	11.9	18.4	14.3	3.2	0

- (1) Average return on assets (except for participation papers and investment deposits) has been calculated through geometric mean.
- (2) The sharpe ratio, used to measure risk-adjusted performance, is calculated by dividing the difference between the returns on risky and risk-free assets by the standard deviation of return on risky assets. In these calculations, the risk-free asset is CBI participation papers.
- (3) Base year for price index of Pride automobiles, rent of residential houses index, land price index, and consumer price index of goods and services is 1383.

Chapter 17 PRICE TRENDS

Velocity of Circulation of Monetary Aggregates						(percent)
	1382▲	1383▲	1384▲	1385▲	1386	
Notes and coins	29.0	32.5	36.6	36.8	36.2	
Money	5.2	5.8	5.8	5.5	5.4	
Liquidity	2.1	2.1	2.0	1.8	1.8	
CPI changes (1383=100) (Esfand 1386 to Esfand 1385)	14.0	15.5	8.2	15.6	22.5	