Chapter 3
Prices

1. MAIN DEVELOPMENTS

The CPI rose by 21 percent during 1989, compared with 16 percent in 1988; most other price indexes also rose faster than in 1988. This year's higher price rises should not be interpreted as a significant deviation from the inflation plateau of the preceding three years, being due principally to the raising of controlled prices and to devaluation; there was also a sharp rise in housing prices as demand rose. Although the recession did curb the rate of price increase, its effect was moderated by forces which have tended to stabilize the rate of inflation in recent years. Towards the end of 1989 and the beginning of 1990, the pace of some price indicators slowed down.

The beginning of 1989 saw devaluation and an increase in controlled prices, both by 13 percent,[1] following two years in which the exchange rate remained stable and an increase in subsidies in 1988. During the rest of 1989, controlled prices rose at about the same rate as other commodities, while in June the exchange rate was again raised by 6 percent.

The steps taken in January set off a round of price rises, and the CPI rose by 5 percent, or by rather less than the exchange rate and the controlled prices, principally because prices had been raised in the preceding year in anticipation of devaluation. The tariff reduction of early 1989 also helped curb the response of prices to devaluation. However, there were some particularly steep increases, and these may have been a response to the very high rise in the price of controlled goods, and perhaps also to some policy announcements suggesting that the exchange rate would be adjusted to prices more frequently in the future.

After the initial round of increases, prices rose at the average rate of preceding years. The price rise of nontradables other than housing and controlled commodities continued to slow down but was still faster than for tradables (Tables 3.4 and 3.5 below).

A major reason why both tradable and nontradable prices rose may have been the expectation that prices would continue to increase at the rate of the preceding three years. These expectations were to a large extent encouraged by the economic policy of the period. In this context, the rapid rise of controlled prices and the partial adjustment of the

[1] By 5 percent on the last trading day of 1988 and 8 percent at the beginning of January 1990.

exchange rate to price rises are particularly relevant. Fiscal developments and monetary expansion both indicate that economic policy was prepared to accommodate an annual inflation rate of 15–20 percent. Economic agents adapted to this rate, adjusted their expectations, and gradually altered prices and contracts. This change in expectations and behavior in itself tended to make the rate of inflation more stable.

The recession to some extent damped down the rise in prices, although this emerged only gradually. Considering the slack demand for labor, adjustment of wages was also

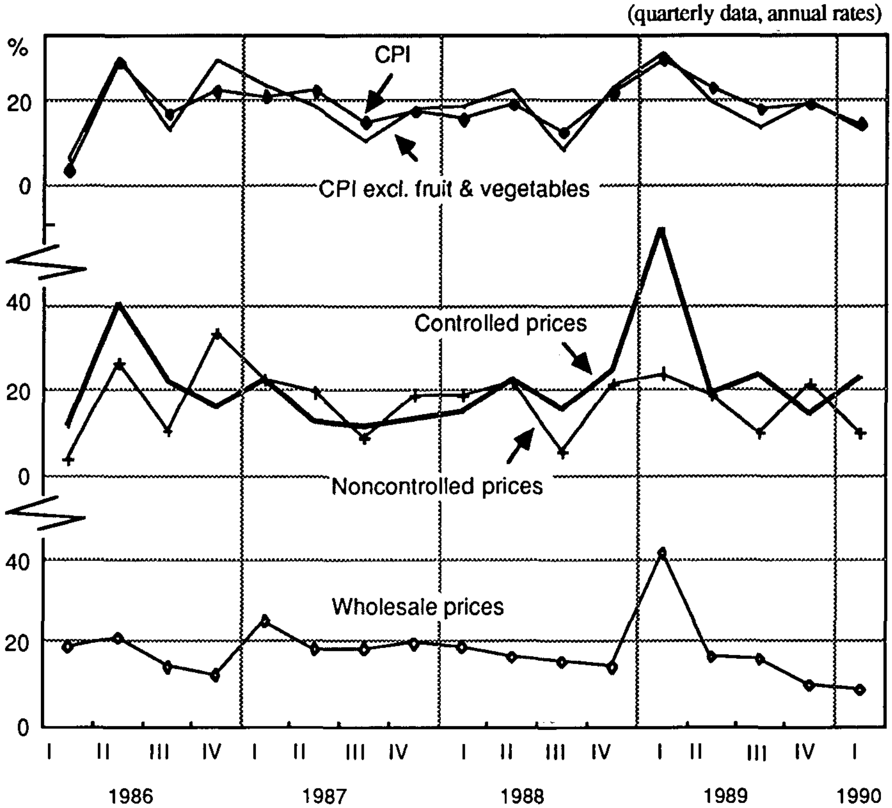
Table 3.1
Selected Price Indexes, 1970–90:I

(percent change, annual rates)

	CPI	Implicit price index of GDP	Implicit price index of Domestic use of resources[a]	Wholesale prices[b]
Change during period[c]				
1970–73	15.4	16.2	16.9	11.6
1974–78	41.2	39.3	40.3	43.6
1979–82	118.9	113.1	117.7	123.1
1983–85	256.1	243.9	247.3	247.0
1986–87	17.9	22.8	21.9	18.0
1988–89	18.5	20.0	18.5	17.7
1986	19.6	26.9	23.7	15.1
1987	16.1	18.9	20.1	20.9
1988	16.4	21.6	17.4	15.8
1989	20.7	18.4	19.6	19.5
1988				
I	17.6	21.7	15.4	16.8
II	18.0	36.0	28.6	18.2
III	10.8	0.1	–0.1	12.9
IV	19.5	31.8	28.2	15.4
1989				
I	30.7	23.7	25.0	43.7
II	20.4	28.6	29.9	14.8
III	14.2	10.6	7.9	13.9
IV	18.1	11.8	16.8	8.6
1990				
I	12.0			12.8
Average change				
1987	19.9	20.5	21.4	18.5
1988	16.3	19.2	16.5	17.5
1989	20.2	21.1	20.5	21.0

[a] Net of direct defense imports.
[b] Prices of industrial output for domestic market.
[c] CPI and wholesale price figures based on monthly data; GDP and resource use, on quarterly data.
SOURCE: Central Bureau of Statistics.

Figure 3.1
Rate of Change of Selected Prices, 1986-90:I



slow, evidently because of labor market rigidities (see Chapter 4). Nominal unit labor costs in the business sector rose more slowly than in 1988, while prices of imported intermediates rose faster.

The end of 1989 and the beginning of 1990 saw a slowdown in the rate of price increase of some commodities (including private services, which, next to housing, account for a large part of nontradables); the wholesale price index of industrial products also slowed down, as did the implicit price index of domestic use of resources and GDP. At the beginning of 1990, the government announced that it would hold back the rate of increase of controlled prices, which should help to curb inflationary expectations and actual price rises. However, at this stage it is still difficult to determine whether we can expect inflation to go down to below 15 percent, i.e. below the range in which it has moved in recent years.

Since the price developments of 1989 were influenced by the expectations of 1988 and by the consequent rise in prices, the two years should be considered together. As can be seen in Table 3.1, 1986–87 and 1988–89 show similar rates of change of the CPI, while the implicit price indexes of domestic resource use and the GDP slowed down to some extent.

2. THE INFLATIONARY PROCESS

In recent years, the inflation rate has shown a clear tendency to level off at the plateau to which it fell the year after the launching of the stabilization program. We cannot fully explain how that plateau was determined, although it seems that a crucial factor was the belief that the government was taking steps to sustain the reduction of the annual inflation rate from some 400 percent to 15–20 percent, but was not prepared to pursue the more stringent policy necessary to achieve a further decrease. Economic policy as a whole accorded with the goal of stabilizing the inflation rate and evidently confirmed the public's assessment of government intentions. Although the adjustment of the exchange rate to current price rises was only partial, the prices of budget-related controlled commodities kept up with the general rise in prices (and in fact overtook it during part of the period). The entire budget was adjusted to price rises, while monetary and credit aggregates were expanded in order to reduce the high interest rates of the period immediately following the stabilization program.

Stabilization at the new inflation plateau tended to be self-reinforcing. Reactions to short-run policy fluctuations were moderate, so long as these were not perceived as significant comprehensive changes in the long-run targets of price policy. The assumption was that in the absence of any such substantive change, the government would not persist in any measures inconsistent with maintaining inflation at its present level.

As people became less concerned about the possibility of sizable price changes, the average term of unindexed contracts rose and the frequency of adjustment of a variety of payments declined. Thus, for example, the frequency of credit card debits was reduced, retail chains and suppliers of durables gave longer unindexed consumer credit, and the public increased its holdings of unindexed deposits (within which the proportion of longer-term deposits rose). The public was also receptive to government bonds unindexed during the first year, and the cost of living allowance (COLA) was paid less frequently. There was also a tendency to reduce the frequency of price adjustments (possibly encouraged by the noncompetitive structure of some industries, which made it easier for producers to fix prices for longer periods).[2]

The combined effect of these changes was to make the inflation rate more stable than in the period of high inflation, when producers were more sensitive to short-run developments. Another factor making for a stable inflation rate was the interaction between

[2] It has been argued that industries in which there is little competition are less inclined to oppose wage increases, since they can more easily shift increased costs to prices. On the other hand, the high concentration of some producing and marketing industries made it easier to achieve price discipline at the time of the disinflation brought about by the 1985 stabilization program.

firms—readiness on the part of some firms to quote prices further ahead made it easier for others to follow suit.

The tendency for inflation to stabilize played an important role in price developments in both 1988 and 1989. In 1988 it led to price increases beyond what was called for by the devaluation, thus damping down the increases which followed the devaluation of early 1989. On the other hand, it probably also limited the response of prices to the economic slack this year.

Exchange-rate policy in 1988 and 1989

Through its direct effect on prices of tradables and its indirect effect on prices of commodities whose supply and demand are affected by the prices of tradables, the exchange rate has served as a principal means of controlling the price level since the stabilization program. However, the experience of recent years has shown that in the short run the exchange rate is a relatively weak instrument and that short-run price changes largely reflect domestic supply and demand factors, as well as the degree to which exchange-rate policy and the trend of inflation are perceived to diverge.

The government refrained from devaluing in 1988, but the effect on prices was limited, since the public assumed that it would eventually do so. The profitability of tradables declined and it was felt that exchange-rate policy had played a significant role in creating the recession, so that both devaluation expectations and the pressure to devalue intensified. Speculative purchases of foreign currency also increased in 1988, particularly at the end of the year.

Against this background, the sheqel was devalued against the currency basket by a total of 13.5 percent in late December 1988 and early January 1989, when it was announced that the exchange rate would be allowed to vary by 3 percent on either side of an official midpoint rate. The midpoint rate was raised by 6 percent in June 1989; it was again raised, by the same amount, in March 1990, when the band was widened to 5 percent in either direction.

The measures of early 1989 allowed for various interpretations, for instance, that exchange-rate adjustment would be more frequent and coincide more closely with changes in domestic/foreign relative prices. This could also imply that the government would be less strongly committed to using the exchange rate as a means of curbing inflation, which might in turn increase inflationary expectations and hence the rate of price increase. This interpretation could well have affected the price rises of January 1989.

The devaluations of June 1989 and March 1990 did not lead to excessive price rises. Although they did indicate an increase in the frequency of devaluation, it seems that the public did not in fact identify this with a higher long-run devaluation rate. In other words, the changes in exchange-rate management were not interpreted as signalling a more inflationary policy. The perception that there had been no essential change in the long-run determinants of inflation was reinforced by the return to the previous rate of increase of controlled prices, and economic agents eventually came to the conclusion that the early 1989 measures were once-for-all actions.

Controlled prices

A major cause of the faster rise of the CPI in 1989 was the accelerated increase in the price of controlled commodities. These commodities, which account for about one third of the CPI basket, fall into three principal groups:

1. Subsidized commodities: milk and milk products, eggs, poultry, bread, and public transport (8 percent of the CPI basket).

2. Commodities supplied by general government (including private nonprofit institutions most of whose expenditure is publicly financed) and public sector enterprises. This category (here referred to as budget-related) includes health and education services, communications, energy, and rates, fees, and licenses (12 percent).

Table 3.2
Price Change of Controlled Goods in the CPI, 1985–89

(percent)

	Weight	1985	1986	1987	1988	1989
During the year						
Controlled commodities						
Budget related						
Subsidized[a]	8	240	17	11	26	30
Other budget related[b]	12	245	24	17	17	26
Total	**20**	243	22	15	20	28
Other controlled[c]	14	168	19	15	10	20
Total controlled	**34**	216	21	15	16	24
CPI	**100**	185	20	16	16	21
Annual average						
Controlled commodities						
Budget related						
Subsidized[a]	8	349	51	16	17	37
Other budget related[b]	12	364	57	20	16	24
Total	**20**	358	55	18	16	29
Other controlled[c]	14	300	49	13	13	16
Total controlled	**34**	338	53	16	15	23
CPI	**100**	305	48	20	16	21

[a] Milk and milk products, eggs and poultry, bread, public transport.

[b] Health and education services, public utilities, PTT, railways, local flights, rates, beef.

[c] Flour, margarine, tea, coffee, cocoa, soft and alcoholic beverages, sugar and sugar substitutes, frozen and canned vegetables, soap powder, refrigerators, insurance, textbooks etc., pharmaceuticals, taxi fares, motor cars, driving lessons, car hire, tobacco and cigarettes.

3. Goods in which competition (among local producers or importers) is limited, such as motor vehicles, flour, sugar, some beverages, refrigerators, pharmaceuticals, text books, taxis, and cigarettes (14 percent).

Table 3.2 presents the annual rate of price change of these three groups. Price policy for the first two is, *inter alia*, a function of the government's desire to contribute to price stability and of the need to reduce the budget deficit. These commodities have in the past often been subject to steep increases simultaneously with devaluation and economic agents have tended to interpret such increases as pointers to the government's inflation policy. In what follows, we concentrate on these two categories (subsidized and other budget-related).

In 1985 controlled prices were raised by much more than the average CPI rise, as part of the government's efforts to reduce the deficit. In 1986–88, the prices of some health and education services were raised by more than the average CPI, although the average for all subsidized and budget-related commodities did not deviate much from the CPI.

In 1987 the government refrained from raising certain subsidized prices, in accordance with an agreement with the Histadrut (the General Federation of Labour); the rate of price increase subsequently accelerated (from April 1988) so that over the entire year, subsidized prices rose no less than the CPI. The average annual rate of increase of subsidized commodities did not lag behind the CPI during this year either, although expenditure on subsidies grew by 40 percent owing to increased production costs.

Prices of subsidized and budget-related commodities were raised by 13 percent in the first quarter of 1989, and although the rate of increase was slower during the rest of the year, the entire year's increase came to 28 percent. Subsidies went down this year by 23 percent in real terms, thus reverting to the level of 1986. The direct effect of the year's rapid increase in controlled prices was to raise the CPI by 2–3 percent.

In sum, the high annual rise of controlled prices does not appear to have been perceived as an indication of a change in inflation policy, but rather as an isolated correction. The announcement in March 1990 of the intention to reduce the annual rise of controlled prices to 10 percent presumably reinforced this interpretation.

Monetary and fiscal policy

Monetary expansion is a vital link in the inflationary process. Often, however, it accommodates to inflation and to changes in money demand and the goals of monetary policy (see Chapter 7).

In 1989, monetary policy tended to be expansionary, as there was considerable pressure to continue reducing interest rates on credit, both because they were still substantially in excess of world rates and in order to stimulate the economy. The interest rate on bank credit went down during the year; on an annual average there was little change in nominal terms, but in real terms it declined. Nominal interest on overdraft facilities also declined (Table 3.3).

Table 3.3
Price Developments: Related Indicators, 1987–89

(annual percent change)

	Average			During period[a]		
	1987	1988	1989	1987	1988	1989
Imports and exports of merchandise[b]						
Imports						
Intermediates	12.3	13.8	20.9	16.0	11.5	22.3
Consumer goods	19.4	6.8	8.0	13.5	9.1	12.5
Producer durables[c]	19.5	5.3	15.7	16.8	5.7	19.9
Exports (excl. diamonds)[c]	16.8	11.3	20.0	15.9	10.5	21.5
Real GDP and use of resources[c]						
GDP	5.5	2.1	1.3	4.3	1.6	2.1
Domestic use of resources[d]	6.2	2.7	–0.9	5.4	1.5	–0.5
Exports (excl. diamonds)	8.8	–2.9	7.1	9.4	–3.9	9.3
Nominal labor cost (business sector)						
Wages	30.7	21.7	18.1	28.1	21.1	14.4
Unit labor cost	23.2	20.2	15.9	..	..	..
General government deficit (percent of GNP)[c]						
Total	0.1	–1.9	–6.1			
Domestic	–1.1	–2.9	–7.9			
Monetary indicators						
Change in M1	60.2	32.3	27.5	59.0	16.4	35.1
Change in M3	37.1	18.6	19.5	35.0	10.2	27.5
Interest rate						
Bank credit	39.0	33.2	33.4			
Overdraft facilities	61.9	46.2	34.3			
Change in exchange rates						
Currency basket	16.0	2.4	16.1	13.5	1.5	20.1
Dollar	7.2	0.3	19.8	5.6	2.0	23.5

[a] Change from fourth quarter of preceding year to fourth quarter of current year.
[b] Exports at official exchange rates, imports at effective exchange rate.
[c] National accounts data.
[d] Excluding direct defense imports.

The lowering of interest rates has conflicting effects on prices. On the one hand, it tends to encourage demand for capital goods and consumer durables, and probably also total domestic demand, pushing up prices, particularly during periods of high activity. On the other hand it reduces the cost of financing, thus curbing the pressure of costs on prices. This year's reduction in interest rates increased demand for various assets, including real estate, thus helping to accelerate the rise in the housing services component of the CPI. On the other hand, because of the economic slack, other prices, particularly of nondwelling investment, do not appear to have been affected. Nevertheless, monetary policy continued to be accommodating.

This year's fiscal policy was not disinflationary, even though most of the increase in the budget deficit was due to the recession and to transient factors (see Chapter 5). Three fiscal measures had direct price effects:

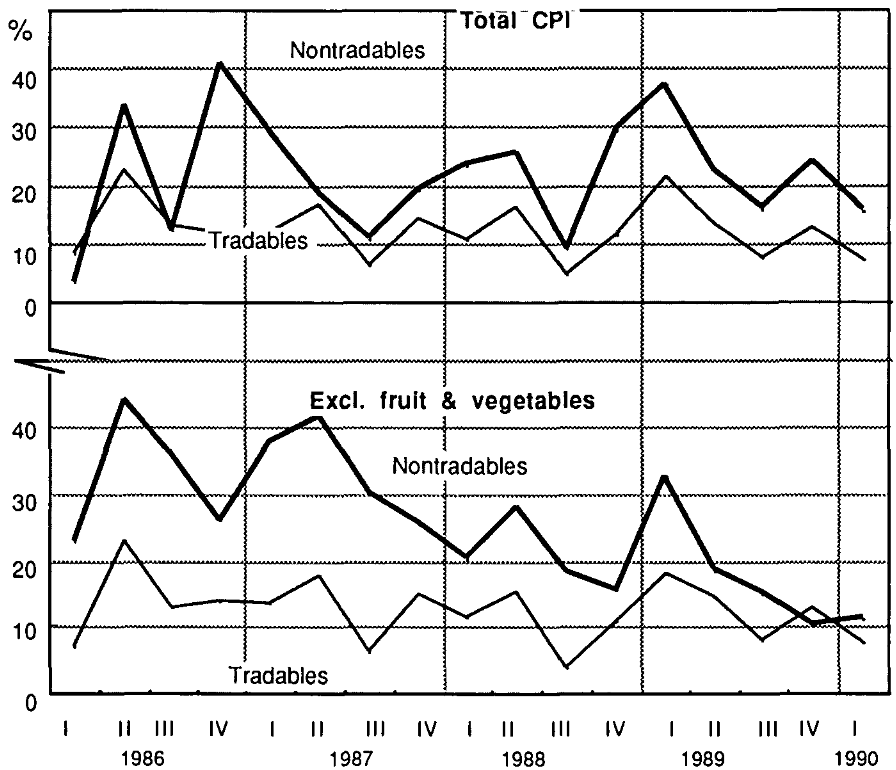
1. The price of subsidized and budget-related commodities was raised appreciably, in order to reduce expenditures, which had risen in 1988.

2. Tariffs were lowered, particularly on durables, in accordance with the trade agreements with the European Community and the United States (see Chapter 6).

3. Exchange-rate insurance payments for exporters were reduced.

Figure 3.2
Rate of Change of Prices of Tradables and Nontradables (CPI), 1986–90

(quarterly data, annual rates)

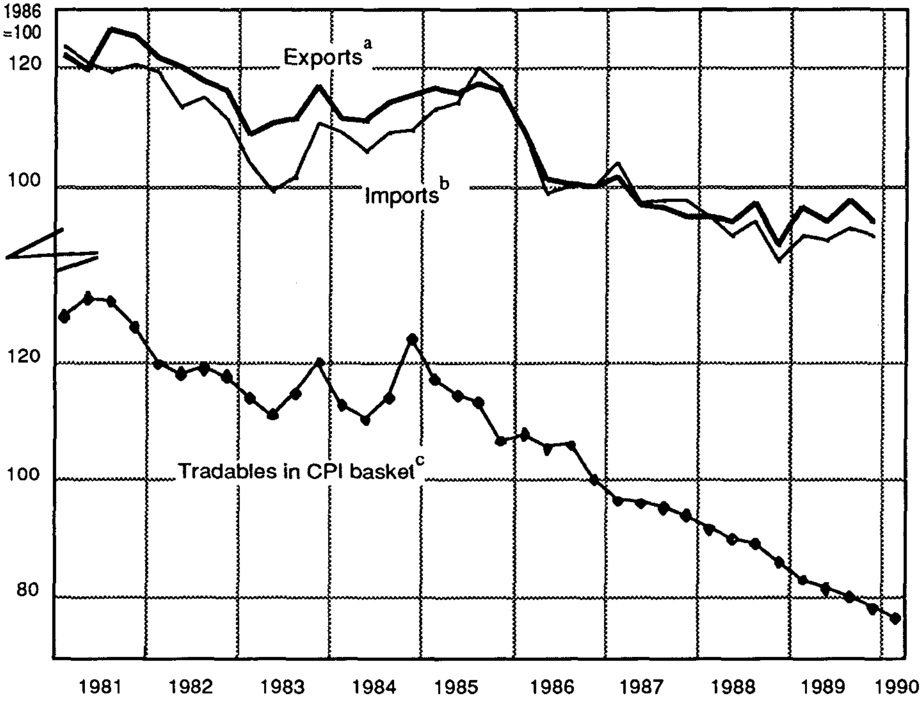


Tradables and nontradables

In order to analyse price developments, in particular as they relate to exchange-rate policy, it is convenient to classify commodities as tradables and nontradables.

Table 3.4 presents such a breakdown for the CPI.[3] The movement of foreign trade

Figure 3.3
Relative Prices of Tradables, 1981–90



[a] Prices of exports (excl. diamonds) relative to implicit prices of domestic resource use (excl. direct defense imports).

[b] Prices of imports (excl. diamonds) relative to implicit prices of domestic resource use, both excl. direct defense imports.

[c] Prices of tradables relative to prices of nontradables (quarterly averages).

prices does not correlate very strongly with the movement of tradable prices, particularly in the short run; nevertheless, the fit is better than with nontradables. Some of the price differences reflect differences in the commodity mix of the categories. If we examine specific groups of imports and exports which are closer to the CPI basket, there are still

[3] In the rest of this section, tradable and nontradable prices refer to these components of the CPI.

Table 3.4
Prices of Tradables and Nontradables, 1986–90:I

(percent change, annual rates)

	CPI[a]		Implicit price indexes[b]		
	Tradables	Nontradables	Use of resources	Civilian imports	Exports
Change during period[c]					
1986–87	13.2	20.5	21.9	11.3	11.1
1988–89	12.3	23.1	18.5	12.1	15.5
1987	12.3	19.4	20.1	18.4	15.9
1988	10.8	21.6	17.4	2.7	10.3
1989	13.7	24.7	19.6	22.3	21.0
1988					
I	11.0	23.5	15.4	3.9	14.3
II	16.3	25.6	28.6	3.7	12.5
III	4.9	9.0	-0.1	9.2	14.7
IV	11.4	29.5	28.2	-5.3	0.4
1989					
I	21.3	37.2	25.0	47.9	52.7
II	13.6	22.5	29.9	16.4	12.4
III	7.8	16.1	7.9	17.0	20.4
IV	12.5	23.9	16.8	11.0	3.7
1990					
I	7.2	15.8	..	..	..
Average change					
1987	13.1	24.0	21.4	19.2	16.6
1988	11.6	19.7	16.5	6.6	10.9
1989	13.3	24.9	20.5	17.0	19.8

[a] Nontradables comprise services other than foreign travel, fruit & vegetables, gas & electricity, butter and cheese, bread and bakery products. Tradables are all other CPI items. The weights in the CPI are 58 and 42 for nontradables and tradables respectively.

[b] National accounts data: domestic resources use is net of direct defense imports; imports and exports exclude diamonds.

[c] Based on quarterly averages.

SOURCE: This and the rest of the tables in this chapter are based on Central Bureau of Statistics data.

significant differences between domestic and foreign trade prices, which originate in various barriers reducing the competitiveness of foreign goods: transport costs, administrative import restrictions, and the sizable proportion of imports in the hands of exclusive importers. The government's direct intervention in setting controlled prices is also important.

Table 3.5
Selected Consumer Prices, 1986–90:I

(percent change over preceding period, annual rates)

	All items (1)	Excl. fruit & vegetables (2)	Column (2) excl. housing (3)	Housing (4)	Controlled commodities[a] (5)	Noncontrolled commodities[a] (6)	Excl. noncontrolled: Tradables[b] (7)	Excl. noncontrolled: Nontradables[b] (8)	Excl. fruit, vegetables, controlled, housing: Nontradables (9)	Excl. fruit, vegetables, controlled, housing: Total (10)
During period[c]										
1986–87	17.9	17.4	20.0	9.5	18.2	17.8	14.0	20.3	33.2	20.5
1988–89	18.5	18.9	16.6	29.0	23.6	17.3	11.6	22.2	19.1	14.2
1987	16.1	18.3	19.1	15.7	14.8	16.5	13.9	18.0	33.1	20.8
1988	16.4	16.2	14.7	23.0	19.9	15.7	9.4	21.5	20.0	12.9
1989	20.7	21.7	18.6	35.2	27.5	18.9	13.9	23.0	18.3	15.5
1988										
I	17.6	13.7	11.8	21.2	13.4	19.3	6.1	32.1	22.3	10.6
II	18.0	21.0	23.6	8.5	30.8	14.9	17.5	12.8	28.2	21.3
III	10.8	9.3	7.4	18.7	8.6	11.3	2.5	19.1	14.8	6.8
IV	19.5	21.4	16.8	46.7	28.1	17.3	12.2	22.8	15.0	13.2
1989										
I	30.7	29.4	31.8	19.6	57.6	24.2	17.1	30.6	36.0	23.9
II	20.4	25.3	19.1	54.6	25.2	19.0	17.5	20.0	15.9	16.9
III	14.2	16.0	10.9	39.5	17.2	13.4	5.0	20.9	13.5	8.2
IV	18.1	16.6	13.7	29.5	14.3	19.2	16.3	20.8	9.4	13.6
1990										
I	12.0	13.6	12.3	18.3	21.4	9.4	5.6	12.5	13.6	8.6
Average										
1987	19.9	19.8	20.4	17.7	18.1	20.4	14.1	24.7	34.5	21.1
1988	16.3	16.2	16.0	17.0	15.9	16.5	11.5	20.7	24.4	15.9
1989	20.2	21.3	18.9	32.3	29.1	17.9	12.5	22.8	20.8	15.5
Weight	1000	935	770	165	195	805	384	419	190	574

[a] The index of price controlled commodities includes subsidized items (milk and milk products, poultry and poultry products, bread, public transport), and other budget-related controlled commodities, i.e.,services supplied by the general government and public sector enterprises (health and education, petrol, gas, water and electricity, PTT, railway fares, local flights, rates, and beef).

[b] For definition of tradables see Table 3.4.

[c] Figures are for end of quarter/year.

In 1988, tradable prices rose faster than foreign-trade prices; the difference is connected with devaluation expectations and the persistence of the inflation rate. In 1989, on the other hand, prices of tradables rose less than foreign-trade prices, apparently because they had risen rapidly in 1988 and because demand weakened. However, the price of tradables increased faster than that of direct consumer imports, which benefited from the tariff cuts mentioned earlier.

Tables 3.4 and 3.5 show that in 1986–88, nontradable prices rose faster than tradable prices; at the same time the implicit price index of domestic resource use rose faster than foreign-trade prices (real appreciation of the sheqel). During 1986 and 1987 these developments in relative prices were due principally to the pressure of demand, while in 1988 the main causes were inflationary expectations and devaluation, as explained above. These expectations had a stronger effect on nontradables, which are less influenced by the exchange rate.

During 1989 nontradable prices rose faster than tradable prices; this is still true if we take out commodities affected by special factors, but the difference is then smaller (see the lower part of Figure 3.2). Prices of domestic resource use rose faster than import prices, on annual average.

Demand and economic activity

During 1989 the GDP and the gross product of the business sector increased by about 1½ percent (Table 3.3); at the same time domestic use of resources excluding direct defense imports declined, while the increase in exports did not suffice to raise total use of resources. In addition, there was an increase in unutilized capacity. At the same time the unemployment rate rose significantly while the employment rate fell. In these conditions one would have expected a slowdown in the rate of price increase and a decline in the relative price of nontradables (see Chapter 2).

The rise in the relative price of nontradables may also be due to an increase in demand for them, in the absence of a general rise in demand; and, indeed, in 1989 there was a substantial increase in the demand for housing, which raised housing prices by 35 percent. However, nontradable prices excluding housing and controlled commodities also rose faster than tradable prices although the difference between them was smaller than in 1988 (Table 3.5).

The proportion of nontradables in gross business-sector product (which does not include housing services) also rose this year. However, in view of the recession it is not clear whether this would have been sufficient to exert significant pressure on the productive capacity of the nontradable sector. Particularly significant is the fact that labor costs rose less in the nontradable than in the tradable sectors, while nontradable prices rose faster. Nevertheless, even if housing prices are allowed for, the relatively high rise in prices of nontradables and the general price level cannot be explained by the development of demand and economic activity.

Labor and raw materials

The increase in unemployment during 1989 reduced the growth rate of labor costs. Moreover, the COLA agreement was revised, making it possible to alter relative wages without accelerating inflation, while weakening the effect of unexpected price increases on real wages.

The total rise in wages also slowed down this year, and as a result business-sector unit labor costs rose by 16 percent, compared with 21 percent in 1988. For the first time in three years, wages and labor costs rose more slowly than prices, although the decline in real wages came to no more than a third of the previous three years' increase. The rigidity of wages was one of the factors making for a rigid inflation rate. In this respect there is a marked difference between the tradable and nontradable sectors: nontradable prices rose faster than tradable prices, while the opposite is true of wages, which rose faster in the tradable sector (see Chapter 4).

During 1989 the domestic price of imported intermediates (excluding fuel and diamonds) rose by 21 percent, compared with 14 percent in 1988. World fuel prices also rose substantially, and energy prices for producers and households were raised by 30 percent and more (on an annual average).

The faster rise in prices of imported intermediates and energy at least partly offset the slowdown in labor costs.[4] Nevertheless this is not sufficient to explain why nontradable prices rose faster, since industry, the principal tradable sector, has a higher import component. Relative wage developments in the tradable and nontradable sectors do not help explain the problem either.

In conclusion, in 1989 the CPI rose by about 5 percentage points more than in 1988. The difference can be attributed in approximately equal parts to the rise in controlled prices and the combined effects of devaluation, world prices, and import taxes. In contrast to 1988, tradable prices lagged behind world prices, because of both the marked increases of the preceding year and the recession. In view of the recession, one would have expected that the rise in the tradable and controlled prices would not have been transmitted in full to the CPI, so that average prices would have risen less than tradable prices. However, looking at the year as a whole, this did not happen. Part of the explanation is the increased demand for housing, which contributed some 2 percentage points to the CPI increase. However, the basic factors which prevented prices from

[4] Prices and costs could also be compared, but the explanatory power of such a comparison is limited, for a number of reasons: (a) part of the increase in costs is itself affected by price developments; (b) costs may reflect demand factors; (c) a calculation of this kind does not take expectations into account. A calculation based on total use of resources shows that prices rose by 21.5 percent in 1989 compared with 15.1 percent in 1988. The difference of 6.4 percentage points breaks down as follows: 4.8 points of the difference is due to faster price increases of imports, 1.6 points to an increase in net indirect taxes (subsidy cuts) on domestic production, and 1.0 points to an increase in the price of housing services. Lower business-sector labor costs are responsible for –1.3 points and the slower increase in the price of public services for –0.2 points; the remaining 0.5 points reflects an increase in gross profits and errors and omissions.

responding faster to the recession appear to have been wage and price rigidities resulting from expectations and habits formed during the preceding three years. In the case of wages, these rigidities also had a real aspect, as reflected in the limited decrease in real wages, despite the slack labor market and the marked rise of previous years.

The variability of price rises

The variability of prices is an indicator of the intensity of market disturbances and adjustment problems facing consumers and producers. A major achievement of the stabilization program was the reduction in price variability. Although in 1989 there was some increase in variability (measured by the standard deviation of monthly changes in prices and relative prices), it did not reach the level of the period of high inflation (see Tables 3.6 and 3.7). The 1989 increase is to a large extent related to the steep price rises generated by the measures taken at the beginning of the year. Specific market developments in housing and in fruit & vegetables also played an important part. The increase in price variability was concentrated in the first half of the year; in the second half variability reverted to the level of the preceding two years or even less.

Table 3.6
Indicators of Variability of CPI, 1970–89

	CPI, average monthly rate of change	Standard deviation	
		Monthly price change	Change in relative prices[a]
1970–73	1.3	1.1	2.4
1974–78	2.9	2.3	2.9
1979–82	6.7	2.2	4.4
1983	9.2	5.0	4.2
1984	15.2	5.6	3.4
1985	9.2	8.2	4.6
1986	1.6	1.2	2.7
1987	1.2	0.6	2.0
1988	1.2	0.8	2.6
1989	1.6	1.1	3.1

[a] Weighted average of the standard deviation of monthly relative price changes for ten principal commodity groups. The relative price of each group is defined as the ratio of the price index of the group to the general CPI.

Table 3.A1
CPI, by Originating Industry, 1987–90:I

(percent change during period, annual rate)

					1988				1989				1990
	Weight	1987	1988	1989	I	II	III	IV	I	II	III	IV	I
Total	1000	16	16	21	18	18	11	20	31	20	14	18	12
Agricultural products	67	–7	19	5	84	–15	33	–4	52	–37	–7	34	–11
Industrial products	430	15	12	15	6	25	3	18	27	16	4	15	6
Food, beverage, tobacco	150	13	21	22	15	37	12	20	60	11	14	9	14
Clothing and textiles	67	14	5	2	–33	66	–27	48	–32	53	–27	42	–31
Wood products and furniture	26	13	8	18	11	3	8	8	33	7	8	26	11
Footwear etc, rubber etc.[a]	20	15	7	8	–12	33	–6	20	–6	20	–11	34	–13
Metals, machinery, etc.[b]	86	21	4	10	15	0	3	–1	20	2	11	7	7
Chemicals, petroleum products	42	8	19	21	22	14	15	25	46	32	–2	13	30
Industrial products n.e.s.	39	26	8	14	6	7	10	9	30	4	13	11	11
Construction & housing services	168	16	23	33	23	10	18	45	20	51	37	28	17
Electricity and water	24	16	6	46	15	2	4	3	55	102	2	41	–2
Transport and communications	63	16	7	24	9	13	9	–2	57	24	26	–3	43
Services	248	27	21	22	21	26	16	21	32	20	20	15	18
Taxes and insurance	55	17	18	30	28	14	14	19	29	34	26	30	21
Public services	83	28	24	23	19	23	18	34	28	21	27	15	20
Private services[c]	111	35	20	18	19	35	15	12	38	14	13	8	15

[a] Footwear and leather products, rubber and plastic products.
[b] Metals, machinery, motor vehicles, electrical equipment.
[c] Personal services, hotels and catering, business services.
SOURCE: Central Bureau of Statistics.

Table 3.A2
Mean and Standard Deviation of Changes in the CPI—Tradables and Nontradables, 1986–89[a]

(percent)

	1986	1987	1988	1989
Annual average change				
Total CPI	48.1	19.8	16.3	20.2
Tradables	42.3	13.1	11.6	13.3
Nontradables	52.0	24.0	19.7	24.9
Controlled commodities	54.7	18.1	15.9	29.1
Noncontrolled tradables	41.5	14.1	11.5	12.5
Excl. controlled, fruit & vegetables, and housing				
Nontradables	62.9	34.5	24.4	20.8
Total	48.2	21.1	15.9	15.5
Standard deviation				
Total CPI	22.3	10.6	7.0	11.4
Tradables	12.6	6.2	5.8	7.7
Nontradables	26.1	11.2	5.7	11.3
Controlled commodities	28.1	13.1	7.0	13.4
Noncontrolled tradables	13.1	6.2	5.6	6.7
Excl. controlled, fruit & vegetables, and housing				
Nontradables	25.6	12.7	6.3	4.2
Total	20.4	12.5	8.3	7.0

[a] Based on the 80-commodity classification of the CBS (*Monthly Bulletin of Statistics*, Table 12). See also notes to Tables 3.4 and 3.5.

SOURCE: Based on Central Bureau of Statistics data.