

## CHAPTER III

### PRICES

#### 1. MAIN DEVELOPMENTS

In 1986 the Consumer Price Index rose by 19.7 percent—an average monthly rate of 1.5 percent, as against an average of 2.7 percent in the last five months of 1985. This relatively low rate of price inflation testifies to the success of the emergency stabilization program launched in July 1985, the principal objective of which was to brake the inflation which had persisted for more than a decade and had in 1984 and 1985 soared to annual rates of several hundred percent.

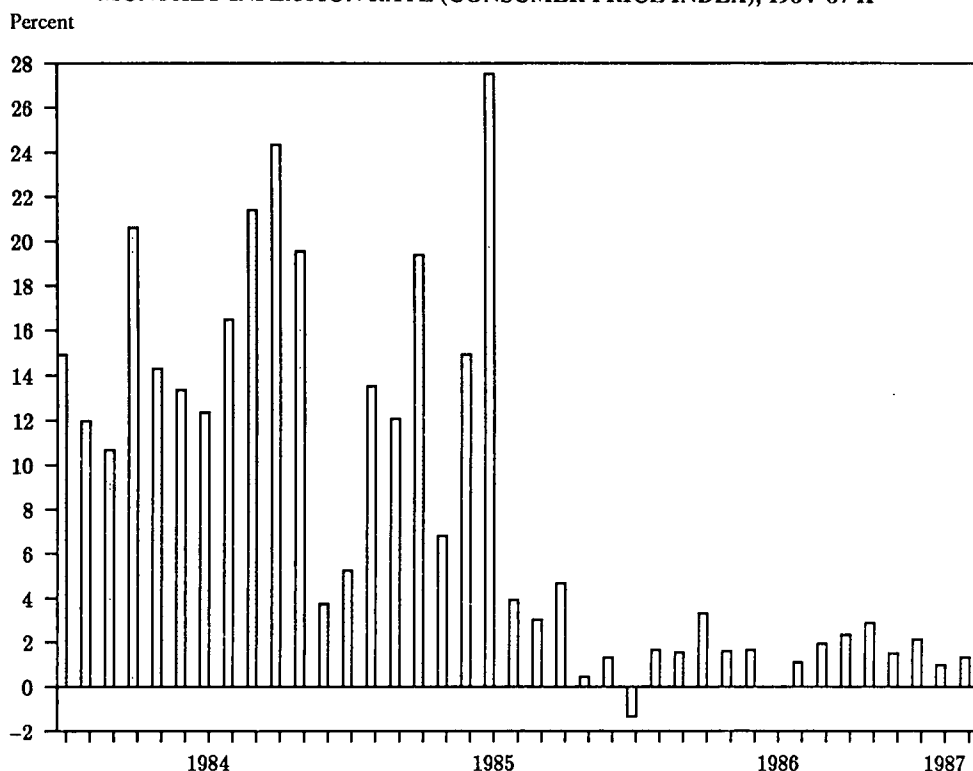
During the year prices, as measured by the CPI, did not move uniformly. In the first quarter the average monthly rise was no more than 0.6 percent. This rate accelerated, albeit without displaying a clear trend, during the rest of the year. A similar picture is shown by other price indexes (see Table III-1 and Figure III-1)—a slight acceleration of the inflation rate in the second quarter of 1986, followed by fluctuations without evident trend; by the end of the year there were even signs of a possible further slowing of inflation.

The CPI rise in 1986 also reflected a far-reaching change in relative prices of the various product groups in the consumption basket. The rise in the prices of farm products and services was particularly high (59.2 and 44.1 percent respectively), while the price increases of the other product groups covered by the CPI (by industry of origin) were relatively moderate: manufactured goods and transport, by 12–13 percent, and construction and housing services by 4.5 percent. Prices of water and electricity even fell by 6.5 percent as a result of the fall in the price of oil.

Assisted by restrictive fiscal and monetary policy (the latter was relaxed to some extent in 1986), the exchange rate continued to be the principal instrument for the maintenance of price stability during 1986. Until August, the dollar exchange rate remained fixed, and from then on it was pegged to the 5-currency basket.<sup>1</sup> During the year, and especially in the first half, the dollar weakened considerably against the currencies of Israel's main trading partners. During the whole of 1986 the sheqel

<sup>1</sup> The weight of the U.S. dollar in the currency basket is 60 percent. The depreciation of the sheqel against the other currencies in the basket was 17 percent, and against the Deutschmark—26 percent.

**Figure III-1**  
**MONTHLY INFLATION RATE (CONSUMER PRICE INDEX), 1984-87 II**



SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

appreciated by one percent against the dollar and depreciated by some 6 percent against the new currency basket. After four months of stability of the sheqel's exchange rate against the currency basket, it was devalued by about 11 percent in January 1987. The devaluation was part of a package deal between the government, the employers' organizations and the Histadrut, which covered wage increases and continued price controls.

The dollar price of imports fell by some 6 percent in 1986, as a result of decreases or stability in the prices of inputs in general and, in particular, the sharp fall of oil prices (by 46 percent, following their earlier fall at the end of 1985). As against this decline in input prices, there was a conspicuous rise of some 20 percent in prices of final-use import goods—goods for current consumption, consumer durables and capital goods (for the detailed price changes of imports, see Table VII-A6).

There was a further rise of the real wage level, continuing the trend that had set in in the last quarter of 1985. Wages rose both in terms of their purchasing power and as the cost of labor at factor prices to employers. The wage increase was substantially in

excess of the wage increments stipulated in the collective wage agreements (see Chapter IV). The increase in labor costs apparently had a share in causing the price rises during the year.

The price increases of domestic products which have no close import substitutes (especially services) were substantially larger than those of other goods; during 1986 they underwent a significant real appreciation. The only exception in the nontradable goods sector was the construction industry, in which prices rose by only 4.5 percent (reflecting a real depreciation).

The cause of this real appreciation, as defined above (expressed by the varying price increases of the different components of the CPI) was due only partly to the rise in aggregate demand. The effect of the latter on relative prices expressed itself mainly in the price rise of private services, the demand for which expanded. The two principal causes of the appreciation were the steep rise in prices of farm products (caused by unexpected supply difficulties, such as pests and other environmental circumstances) and, particularly, the higher fees for public services and the subsidy cuts. Fees were raised and subsidies were cut in order to reduce the public sector deficit and, in the longer run, to improve the balance of payments and contribute to price stabilization.

The devaluation of January 1987 did not cause an acceleration of price inflation (as measured by the CPI) in the first quarter of 1987: the monthly inflation rate remained at 1.5 percent. There was, however, an accelerated rise in the wholesale price index of manufactured goods. The different response of the two indexes to the devaluation seems to be due to two causes: (a) The wholesale price index is mainly made up of goods which have close import substitutes, or for which producers have the alternative of export; prices of such goods therefore move promptly in accordance with nearly the whole rate of devaluation. The CPI, by contrast, is weighted heavily with products the prices of which are determined in the local market, so that devaluation affects them only indirectly and with a greater time lag and, sometimes, not necessarily to the full rate of the devaluation (for example, at times of unemployment). (b) Declines in prices of farm products in the first quarter of 1987 and seasonal price falls of other components of the consumption basket in this period at least partly offset the effect of the devaluation.

**Table III-1**  
**SELECTED PRICE INDEXES, 1983-87 I**  
 (Percent change during period, annual rate)

	1983	1984	1985	1986	1985				1986				1987
					I	II	III	IV	I	II	III	IV	I
<b>Consumer prices</b>													
Consumer Price Index	191	445	185	20	221	361	247	29	8	30	13	30	19
Controlled prices <sup>a</sup>	201	382	255	19	456	464	416	-2	9	46	13	10	24
Uncontrolled prices	188	459	172	20	187	340	214	38	7	26	13	36	18
Consumer Price Index, excl. fruit and vegetables	194	438	186	17	217	389	234	28	3	30	15	20	22
Food, excl. fruit and vegetables	209	424	189	17	269	375	292	1	15	48	7	4	23
Fruit and vegetables	140	553	179	65	280	93	532	30	95	18	-6	249	-9
Housing prices	197	467	192	4	237	352	192	63	-26	13	2	35	18
<b>Wholesale prices of industrial output</b>	202	447	153	15	205	233	203	33	16	22	11	12	32
<b>Input prices in:</b>													
Residential construction	178	476	136	24	185	221	162	29	21	36	22	18	35
Road construction	188	418	150	18	260	185	177	38	18	25	19	11	39
Agriculture	206	423	167	6	269	287	166	34	17	1	11	-5	30
<b>Exchange rates</b>													
NIS/\$	220	493	135	-1	226	368	92	4	-0	0	-2	-1	36
NIS/currency basket	206	462	154	6	241	379	126	14	8	8	5	3	55

<sup>a</sup> The index of controlled prices comprises the following products covered by the CPI: Flour, eggs, frozen meat, frozen chicken, edible oil and margarine, milk and dairy products, local rates, electricity, water and gas for household use, tuition fees for kindergarten, elementary and secondary schools, cigarettes and tobacco, urban and inter-urban bus fares, telephone and postal services. The proportion of goods and services under price control is some 20 percent of the goods and services covered by the CPI.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

Table III-2  
**THE CONSUMER PRICE INDEX BY MAIN ITEMS, 1984-87 I**  
 (Percent change during period, annual rate)

	Weight in				1985				1986				1987
	1980	1984	1985	1986	I	II	III	IV	I	II	III	IV	I
<b>Consumer price index, total</b>	1000.0	445	185	20	221	361	247	29	8	30	13	30	19
Agricultural products	79.4	540	192	59	299	127	522	30	80	29	-5	190	-8
Manufactured products	453.0	441	158	12	173	359	205	16	4	25	11	12	12
Excluding food, beverages and tobacco	273.5	449	143	9	123	365	154	32	-8	15	13	18	0
Construction and housing services	196.6	464	191	4	236	353	190	63	-25	14	2	36	8
Electricity and water	36.4	297	289	-7	589	468	487	-0	-13	-25	6	11	6
Transport and communications	62.1	445	241	13	484	528	360	-20	20	28	9	-3	25
Services	172.5	423	207	44	199	431	274	48	39	65	40	34	26
Taxes and insurance	38.8	471	286	58	245	817	307	73	49	187	21	20	10
Public services	58.1	446	203	39	198	369	299	52	33	35	58	33	25
Personal services	75.6	378	191	51	169	347	269	62	54	36	53	61	46

SOURCE: Central Bureau of Statistics.

## 2. PRICE INFLATION IN 1986 AND CHANGES IN RELATIVE PRICES

For the first time in more than a decade of high inflation, an efficacious disinflation policy was adopted in the second half of 1985. Inflation was brought down drastically by the emergency stabilization program—to a monthly average of 2.7 percent in the last five months of 1985, and to 1.5 percent a month in 1986.<sup>2</sup>

The program was initiated by a one-time devaluation of 18.8 percent and a decision to maintain the dollar exchange rate around NIS1.5/\$, on condition of continued wage stability. The prices of most goods and services were raised by 17 percent; the price increases of most subsidized products and services ranged between 45 and 75 percent, and some were raised up to 100 percent. A tripartite agreement between the government, the employers' organizations and the Histadrut (the General Federation of Labor) provided for a total price freeze; the cost-of-living allowance agreement was partially suspended and to be replaced by a new agreement in October 1985. Monetary policy was restrictive, and fiscal policy was designed to curb demand in order to improve the balance of payments and thereby support the disinflation process. The fiscal measures adopted to this effect were cuts in public spending, tax increases and subsidy cuts which together reduced private disposable income (and increased net government revenue).

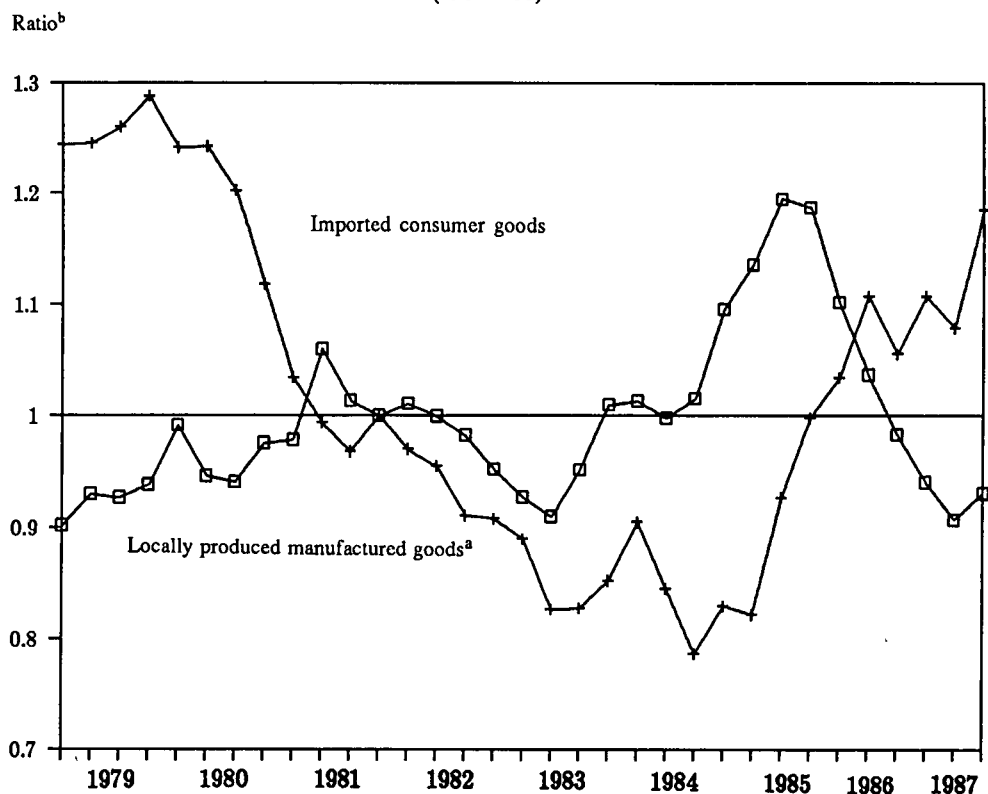
The maintenance of a fixed exchange rate remained the principal instrument for stabilizing the price level in 1986, as in the second half of 1985. Exchange rate stabilization was supported by a nearly balanced public sector budget and by a tight monetary policy (in the course of 1986, however, monetary restraint was relaxed to some extent). Until August 1986 the sheqel was pegged to the U.S. dollar, and from then until January, to the five-currency basket. As a result of the dollar's sharp fall against the other currencies in the basket, the sheqel appreciated during the year by one percent against the dollar, and depreciated against the other currencies. The Deutschmark, for example, appreciated on average by 26 percent against the sheqel; against the basket the depreciation was about 6 percent, and against the four currencies in the basket other than the U.S. dollar—some 17 percent.

The low depreciation of the sheqel during the year reflected itself in the relatively moderate price rises of goods affected by international trade; the price index of manufactured goods included in the CPI rose by only some 12 percent and the wholesale price index of industrial output rose by some 16 percent.<sup>3</sup> These price rises

<sup>2</sup> In addition to arresting inflation, the program had two other objectives: to increase the foreign currency reserves and improve the balance of payments, and to lay the ground for the renewal of economic growth.

<sup>3</sup> Both indexes rose less if food products are excluded; the abolition of subsidies in the second quarter of 1986 raised prices of processed foods by more than the average.

**Figure III-2**  
**PRICES OF MANUFACTURED GOODS IN THE CPI,<sup>a</sup> RELATIVE TO PRICES (AT**  
**OFFICIAL EXCHANGE RATE) OF IMPORTED CONSUMER GOODS, 1975-87**  
**(1981=100)**



<sup>a</sup> Excl. food, beverages and tobacco.

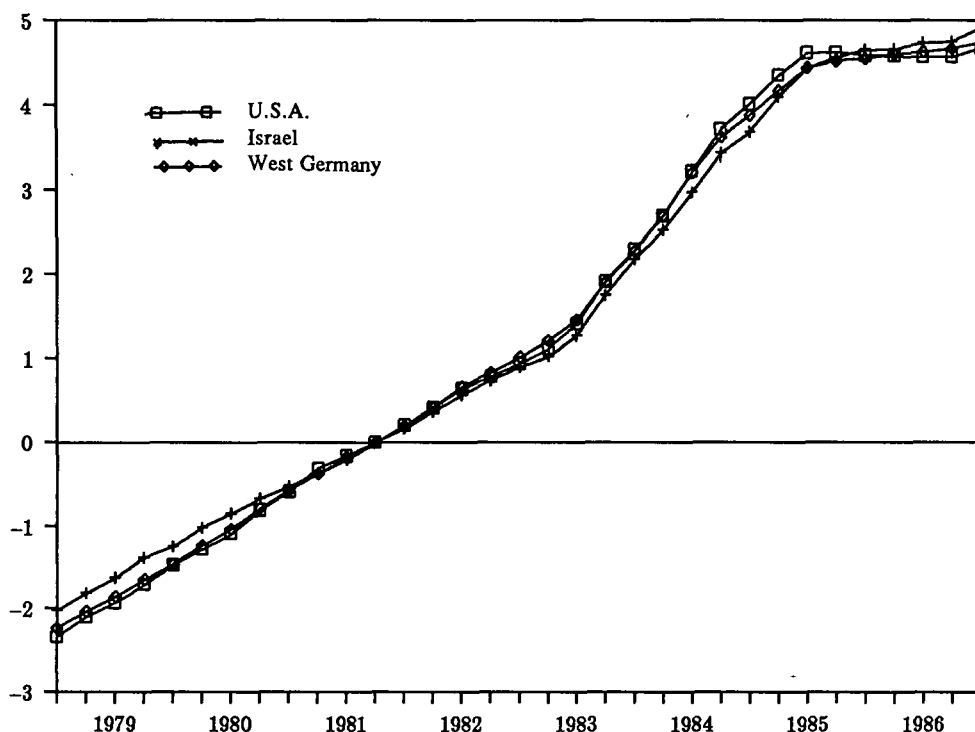
<sup>b</sup> Semi-logarithmic scale.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

correspond approximately to the price rise of industrial goods abroad and the depreciation of the sheqel, as caused by the manner in which the exchange rate was fixed during the year (see Figures III-2 and III-3).<sup>4</sup> The price movements of internationally tradable goods were as could be expected from anchoring the price system to the exchange rate, since local prices of tradable goods will under these conditions move fairly closely in line with world prices. The prices of other goods (those which

<sup>4</sup> Prices of industrial products are not the only ones affected by international trade, but data for them are available for comparison, so they can serve as an indicator of the prices of tradable goods in general.

**Figure III-3**  
**WHOLESALE PRICES INDEXES IN ISRAEL, U.S.A. AND WEST GERMANY, AT**  
**OFFICIAL EXCHANGE RATE, 1979-86\***



\* Semi-logarithmic scale.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

are nontradable due to high transfer costs or administrative barriers to trade) will move relative to tradables in accordance with their specific demand and supply conditions. In short, a general rise of aggregate demand will pull up prices of nontradables, leading to a higher import surplus and to a real appreciation. And *vice versa*: a contraction of aggregate demand will lower prices of nontradables, reduce the import surplus, and cause a real depreciation.<sup>5</sup>

The increase of resource uses in 1986 exceeded the growth of GNP. As was to be expected, this rise in excess demand reflected itself both in a bigger import surplus

<sup>5</sup> Local demand and supply conditions will of course also affect the price movements of tradables, due to transfer costs, import duties, institutional constraints and imperfect competition, but prices of tradables will vary within a narrower range than those of nontradables. Moreover, if local prices are inflexible downwards, a fixed exchange rate regime together with price stability abroad will in the short run prevent a real depreciation even when market forces push towards it.



and in a real appreciation: prices of goods other than industrial (which are mostly nontradables) rose during 1986 by 23.5 percent—more than twice the price rise of industrial goods.

An examination of the CPI, however, shows that only the price rise of one component of the consumption basket was directly attributable to the rise of aggregate demand—that of private services (see Table III-2). The explanation for the higher price increases of other components of the CPI relative to those of industrial goods is to be found mainly on the supply side—temporary supply difficulties in agriculture, and the government's policy of cutting subsidies, raising various imposts and fees for public services. Therefore these were the principal causes of the real appreciation as reflected by the CPI. The relatively slight importance of the rise of aggregate demand in the explanation of the real appreciation may in part be due to statistical biases, but its principal cause was the non-uniform expansion of demand.<sup>6,7</sup> Most of the increment of demand was concentrated in tradable goods, thereby directly taking the form of a bigger import surplus; at the same time there was no corresponding increase in the domestic output of nontradable goods at the expense of tradables—enabling the prices of the former to rise.

The price rises of farm produce were due mainly to supply factors—despite the reduction in the supply of vegetables by pests and climatic conditions, their import was totally prohibited. Demand being relatively inelastic, the ban on imports caused any variation of supply to translate into sharp price fluctuations.

The price rise of services was due, in part, to demand pull, but mostly resulted from fiscal policy which sought to reduce the public sector deficit. Indirect taxes were raised and fees for public services were increased. Local rates were raised by 70 percent; kindergarten and school fees—by 50–90 percent, and services of the health insurance funds, by 44 percent. The average rise in the price of public services during 1986 was 39 percent, as against a rise of only 12 percent in the price level of industrial goods (see Table III-3).

Prices of private services also rose considerably (although less than those of public services); this is partly explainable by the rise of similar public services (for example, medical services), but the main explanation is the expansion of demand in 1986, following two years of contraction. The price increases seem to have coincided with the lifting of price controls.

<sup>6</sup> The CPI is the only index that permits a systematic examination of the changes in relative prices during the year, but since the CPI does not reflect the composition of the GNP, its use for the analysis of relative prices may distort the relative force of different events.

<sup>7</sup> Industrial goods are also not completely tradable, and part of their price rise was due, no doubt, to demand pull.

**Table III-3**  
**SELECTED PRICE INDEXES, AVERAGES 1974-87 I**  
 (Average percent change during period)

	Average				1985				1986				1987
	1974-1978	1979-1984	1985	1986	I	II	III	IV	I	II	III	IV	I
<b>Consumer prices</b>													
Consumer Price Index	39	161	305	48	29	47	48	9	1	7	3	7	5
Controlled prices <sup>a</sup>	18	155	376	50	38	58	71	0	0	9	3	3	5
Uncontrolled prices	63	163	290	48	28	45	42	11	1	6	3	7	5
Consumer Price Index, excl. fruit and vegetables	39	161	303	46	28	48	49	7	1	6	4	5	5
Food, excl. fruit and vegetables	42	167	312	46	29	46	61	1	2	7	5	1	5
Fruit and vegetables	40	156	331	80	45	31	24	43	9	10	-7	29	10
Housing prices	33	176	297	32	33	50	40	11	-6	3	0	8	4
<b>Wholesale prices of industrial output</b>	43	167	266	45	27	36	44	7	4	5	3	3	6
<b>Input prices in:</b>													
Residential construction	39	164	246	47	28	36	40	3	6	6	7	5	7
Road construction	47	167	255	46	32	34	40	7	6	4	5	4	7
Agriculture	43	167	280	39	31	42	42	6	5	1	2	-0	4
<b>Exchange rates</b>													
NIS/\$	34	156	302	26	36	38	47	-0	0	-0	0	-0	8
NIS/currency basket <sup>b</sup>	54	141	308	45	31	44	54	4	4	2	4	1	11

<sup>a</sup> The index of controlled prices comprises the following products covered by the CPI: Flour, eggs, frozen meat, frozen chicken, edible oil and margarine, milk and dairy products, local rates, electricity, water and gas for household use, tuition fees for kindergarten, elementary and secondary school, cigarettes and tobacco, urban and inter-urban bus fares, telephone and postal services. The proportion of goods and services under price control is some 20 percent of the goods and services covered by the CPI.

<sup>b</sup> A 5-currency basket composed of: US\$, DM, £, FFr, Fl.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

In 1984–85 economic difficulties and recurrent attempts to reduce wages and disposable income caused demand for private services to contract. In these two years private consumption of 'other services' fell by 4 percent according to the national accounts. This contraction of demand, combined with the price freeze imposed as part of the July 1985 stabilization program, eroded the relative price of private services. As said above, this trend reversed itself in 1986 and demand for private services increased again, as reflected in the 5 percent rise in consumption of 'other services.' The expansion of demand, combined with the lifting of price controls, led throughout 1986 to sharp adjustments of prices and quantities. The movement of the relative price of private services over time shows that part of the price increases of 1986 represented a return to the previous level of relative prices and, in part, exceeded it (see Figures III–4 and III–5). In some services price adjustments may not yet have run their course while others may have overshoot their long-term relative level so that their prices can be expected to decline.

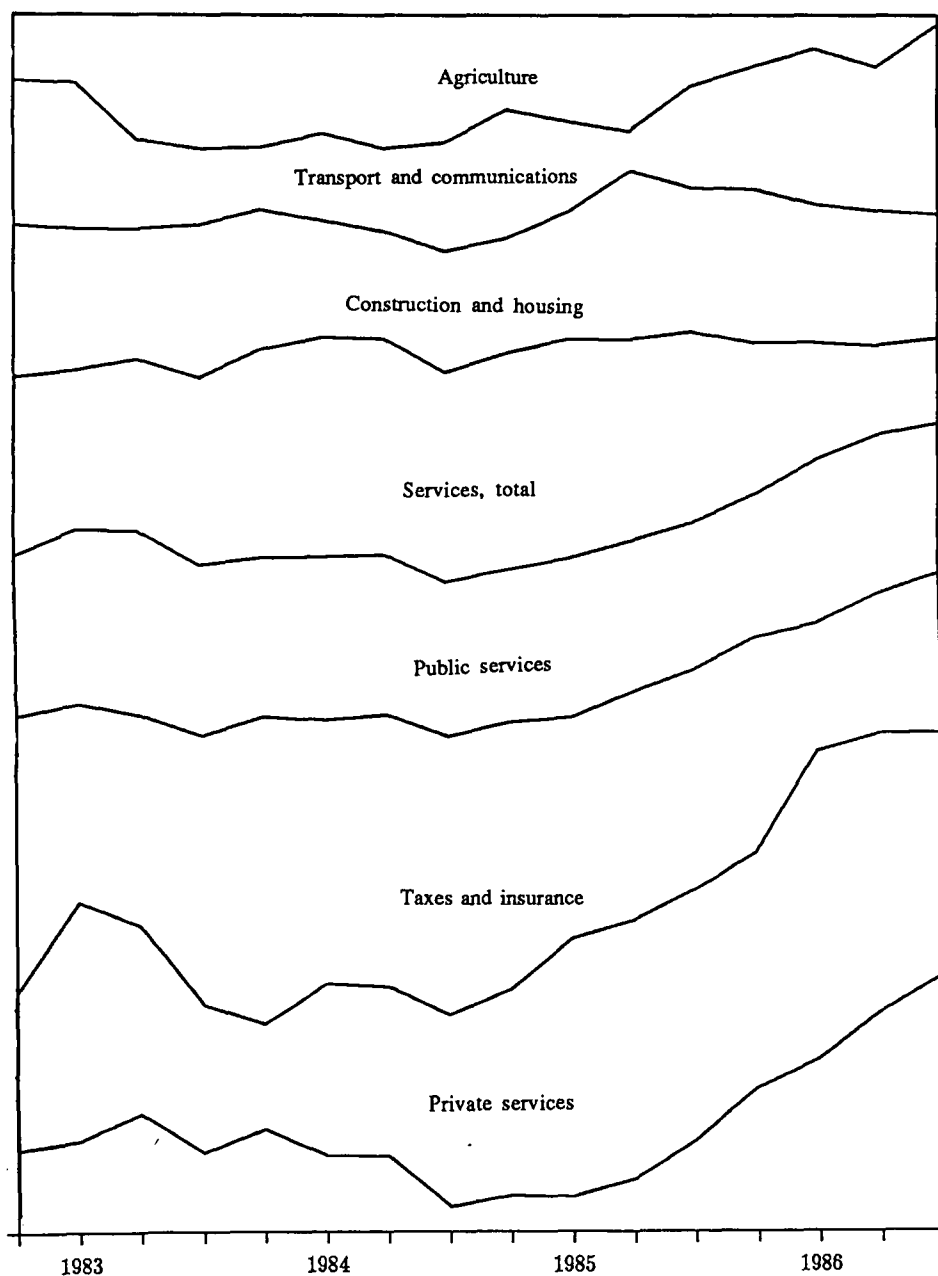
Relative prices of housing services and residential construction fell during 1986 (for detailed developments in this sector, see Chapter VI).

The substantial fall of input prices in general, and of oil in particular, is reflected in the relative prices of transport and communications, electric power and water: prices of transport and communications remained unchanged—the combined result of the subsidy cuts on the one hand and the fall in oil prices on the other. The prices of electric power and water declined during the year by 4.5 percent—also as a result of lower oil prices, the effects of which were partly offset by the subsidy cuts.

Labor costs per unit of output increased sharply at the end of 1985 and during 1986 (for a detailed discussion, see Chapter IV). We cannot offer a satisfactory explanation for this rise, but it may well have been the result of the wage agreements at the plant level signed before June 1985 (and perhaps even earlier) rather than the result of current market forces. Another possible reason for the rise in labor costs may have been the gap between actual inflation and exchange rates and the expectations of business firms as regards devaluation and inflation. This had the result that nominal wage increases that were expected to be eroded by the anticipated inflation became real wage increments. Average real wages may also have gone up as a result of the change in relative prices caused by the fall in the value of the U.S. dollar against the European currencies: firms which benefited from this change in the cross rates raised wages while others have not yet completed their adjustment to the new relative prices. The adjustment process is slow—in part, because wages are inflexible downwards.

The price rises caused by the government's measures to reduce the deficit (higher local rates and fees for public services, and subsidy cuts), and those due to natural damages in agriculture, also pushed wages up through the c.o.l. mechanism. However, the rise of wages was in excess of the increments stipulated in the collective wage

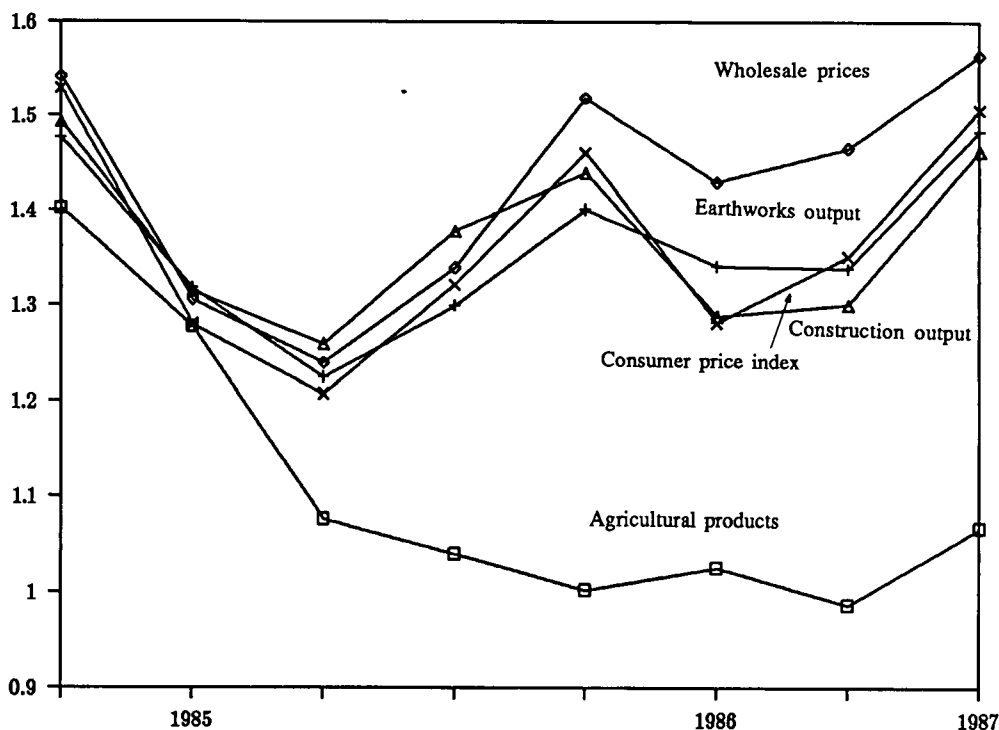
**Figure III-4**  
**PRICE INDEXES OF PRODUCT GROUPS IN THE CPI RELATIVE TO**  
**PRICE INDEX OF INDUSTRIAL PRODUCTS<sup>a</sup>, 1983-86**  
 (Quarterly averages, I 1983 = 100)



<sup>a</sup> Excl. food, beverages and tobacco.

SOURCE: Central Bureau of Statistics and Bank of Israel calculations.

**Figure III-5**  
**SELECTED PRICE INDEXES, 1985-87 I**  
 (During quarters, February 1985 = 100)



agreements, so that the c.o.l. mechanism played only a small role in the wage rise in 1986. The upswing in economic activity which became noticeable in the second half of 1986 may have added a demand-pull element to the wage increase. The steepest wage rise recorded was in the private services sector, in which employment also increased, making it difficult to say whether the wage rise was due only to the expansion of demand, or whether it had an exogenous component, making the wage increase one of the factors that pushed up the price of private services.

From what has been said above it seems that the wage rise was not fully consistent with what might have been expected from market forces, but was to a significant extent due to institutional factors and to erroneous expectations of business firms as regards inflation and devaluation. The wage rise therefore caused prices of nontradable goods and services to go up, cut into the competitiveness of tradable goods in foreign markets, and perhaps was also responsible for some part of the rise in their local prices. The rise in wages therefore contributed to the real appreciation. This assumption was indeed behind the January 1987 devaluation, which had the purpose

of eroding real wages and thereby preventing a deterioration in the balance of payments and a rise in unemployment. Wage movements during 1987 will show whether in 1986 market forces exerted a downward pressure on real wages which failed to materialize because of the downward inflexibility of money wages (a problem that is solvable by devaluation) or whether wages were pushed up by other factors—in which case the problem will have to be tackled in the future without resort to devaluations.

It is also possible that the mechanism of the wage bargain in Israel creates a 'hard core' of nominal yearly wage hikes. As long as this continues to prevail, the corollary will be that a parallel 'hard core' of devaluation and inflation will counter excessive rises of labor costs, unemployment and deterioration in the balance of payments.

### 3. PRICE CONTROLS

The stabilization program was accompanied by administrative price controls covering 90 percent of the private consumption basket (farm produce was the main item excluded from price control). The main purpose of the imposition of price controls was to break the inertia of inflation. Controls began to be lifted in 1986: by January 1987 only 46 percent of the goods and services were still under price control, and the government intends to reduce this until the end of 1987 to 25 percent—the level that had prevailed in Israel also in the past. The goods and services under these controls are, in part, monopolistically produced goods, and in part, basic goods and services.

Price controls seem to have been administered flexibly, and no shortages or black market appeared. The goal of breaking the inflationary inertia seems to have been achieved. Moreover, in industries characterized by monopolistic competition price controls may in some cases even have induced both an expansion of output and a lowering of prices.

At present it seems that the continuation of price controls is not likely to play a significant role in price stabilization. On the contrary: there is no doubt that the bureaucratic mechanism itself, and the constant need of firms to obtain permits for price increases, cause distortions in the economy even when no signs of shortages are apparent in the marketplace. The main reason for maintaining price controls is that the Histadrut insists on them, as stipulated in the January 1987 package deal.