

CHAPTER III

PRICES

1. MAIN DEVELOPMENTS

The rate of inflation fell drastically in the course of 1985. During the year, inflation (as measured by the Consumer Price Index) was 185 percent, as against 445 percent in the previous year. The fall of the inflation rate was concentrated mainly in the second half of the year, as a result of the economic stabilization program launched in July. Towards the end of the year inflation was almost completely arrested.

Economic policy in the first half of 1985 was marked by efforts to repeat the partial and temporary success in slowing inflation that had been achieved by the first package deal (in force from November 1984 to February 1985). The inflation rate fluctuated considerably in this period, as subsidies were cut successively and as cost pushes, which had for a short time been repressed by the package deal, were relieved in waves of approved price increases. Average monthly inflation in the first half of 1985 (as measured by the CPI) was about 12 percent. This was less than the 15 percent average of 1984, but substantially higher than the 3.7 and 5.3 percent, respectively, in December 1984 and January 1985, which had resulted from the first package deal.

For the first time in a decade a — so far efficacious — policy was adopted in the second half of 1985 to arrest the high inflation that had prevailed in Israel throughout the last decade. As a result, inflation slowed drastically, to an average monthly rate of 2.7 percent in the last five months of the year, and to 1.2 percent per month in the first quarter of 1986.

The disinflationary policy of the second half of 1985, in the framework of the stabilization program launched on July 1, was initiated by a massive devaluation of 18.8 percent and a general price rise at a similar rate — 17 percent in most goods and services, excepting only subsidized goods and services, whose prices rose by 45–100 percent as subsidies were cut. From then on, the stabilization program maintained a stable exchange rate against the U.S. dollar, but since the latter fell against the other major currencies, the sheqel depreciated against the trade-weighted basket of currencies. Prices of goods and services were frozen under the Emergency Regulations, and the cost-of-living allowance agreement was partially suspended with the consent of the Histadrut (The General Federation of Labor). This caused considerable erosion of real wages during the first months of the program; towards the end of the year, previously agreed nominal wage increments were paid, which partially compensated for the initial wage erosion.

In addition to these steps, which had a direct impact on prices, the program

Table III-1
SELECTED PRICE INDEXES, 1982-86 I
 (percent change over the period, annual rate)

	1982	1983	1984	1985	1984				1985				1986
					I	II	III	IV	I	II	III	IV	I
Consumer prices													
Consumer Price Index	132	191	445	185	311	496	536	465	221	361	247	29	8
Controlled prices	143	206	382	252	356	352	486	347	459	456	410	-3	9
Uncontrolled prices	129	187	459	172	301	534	548	493	185	341	214	39	7
Fruit and vegetables	132	194	438	186	313	479	551	439	217	389	234	28	3
Other food	153	209	424	189	380	360	603	386	269	375	292	1	15
Wholesale prices ^a	138	202	447	153	345	387	656	446	205	233	203	33	16
Input prices													
Construction	130	178	476	136	358	650	575	375	185	221	162	29	21
Road construction	133	188	418	150	300	479	524	397	260	185	177	38	18
Agriculture	141	206	423	167	291	468	562	410	269	287	166	34	17
Exchange rates													
NIS/\$	116	220	493	135	309	466	731	541	226	368	92	4	0
NIS/foreign-currency basket	100	194	436	170	440	382	556	385	256	389	154	20	9

^a Prices of industrial output for domestic market.

SOURCE: Based on data of the Central Bureau of Statistics.

included measures designed to curb demand, and thereby simultaneously to improve the balance of payments and to support the slowdown of inflation. Central among these measures were subsidy cuts, tax increases and cuts in public consumption, as well as very sharp monetary restraint (the effect of the restrictive monetary policy on the rates of interest is described in Chapter VIII).

2. THE FIRST HALF OF 1985

In the first half of 1985, two successive package deals were concluded between the government, the Histadrut, and the employers' organizations. The first was in force from November 1984 to February 1985. It was followed by a second agreement which originally was to have lasted for eight months, until October 1985 (for a detailed description of the package deals see Appendix).

The main provisions of the package deals were: partial elimination of subsidies, accompanied by the neutralization of the resulting price increases from the cost-of-living agreement, the imposition of price controls and a complete price freeze during the first package deal, and predetermined price rises at an average rate of 3–5 percent a month during the second. The two agreements allowed the government to raise the prices of subsidized goods and services more rapidly than other prices, enabling it to cut subsidies. There was no freeze of the exchange rate in either package deal; during the first, the sheqel was devalued against the US dollar at the rate of 7.5 percent a month, and during the second — by 13 percent. Both package deals, and especially the first, were accompanied by a sharply restrictive monetary policy (see Chapter VIII).

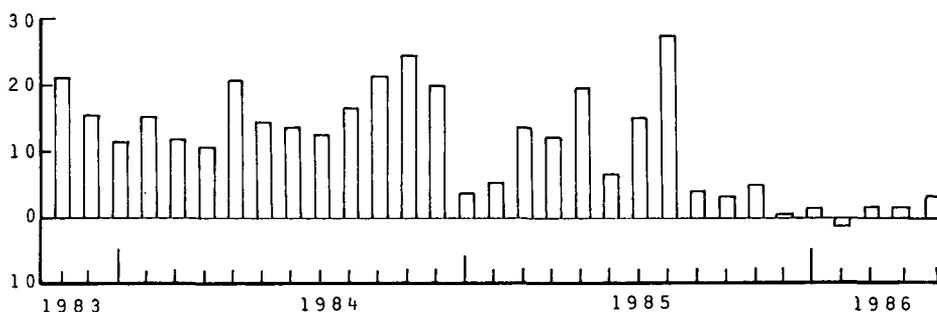
The first package deal was partially successful in slowing inflation. In December 1984 and January 1985, inflation ran at 3.7 and 5.3 percent respectively. The second package deal, however, failed to attain its objectives (see Figure III-1). It became a succession of policy measures and supplementary partial agreements which endeavored to improve the program's functioning. It eventually became clear that the second package deal had failed to arrest inflation (which had returned to the high rate of 1984), and it was cut short by the stabilization program of July 1, 1985.

The cumulative impact of the subsidy cuts during the two package deals is reflected in the different rates of price rises for goods and services under price control and those that were not controlled. From October 1984 to June 1985 the price index for controlled goods rose 16 percent more than the consumer price index excluding controlled products.

Throughout 1984 and in the first half of 1985 there was a considerable improvement in the balance of payments. The import surplus contracted, its financing improved, and the subsidy cuts reduced the government's deficit. Tax revenue increased, and U.S. aid was given in the form of outright grants rather than loans. In addition, the level of domestic public consumption was frozen, so that its share in the gross domestic product declined. The failure of the package deals to bring about a significant and lasting slowdown of inflation is particularly conspicuous against the background of these favorable developments.

The reduction of the government deficit to a level at which it can be financed

Figure III-1
MONTHLY INFLATION RATE (CPI), OCT. 1983–APRIL 1986
 (percent)



from stable sources is a precondition for success in arresting the inflationary process. Fulfilment of this precondition is essential if the exchange rate is to be stabilized without generating public expectations of imminent devaluation — expectations which generate pressures on the foreign currency reserves. It is particularly important to avoid financing the deficit by recourse to foreign borrowing from unstable sources (such financing means the sale of foreign currency to the public in order to finance domestic government operations).

The program must also have elements which will ensure that the slowdown of inflation does not create intolerable distortions of relative prices. These have adverse effects on the real economy (unemployment and deterioration in the balance of payments) and eventually tend to lead to abandonment of the program. There is no way of knowing whether or not the progressive decline in the government deficit (a process which began in 1984) fulfilled the first condition. It is possible that even if the package deals had succeeded in slowing inflation in the short run, they would have failed in the longer run because of difficulties in financing the government deficit. Such difficulties would have compelled the government to cut the budget still more, or tempted it to resort to devaluation and renewed inflation. The latter course, however, would not have eliminated the need to finance the government deficit from the foreign currency reserves, and would therefore not have provided a solution for the basic problem — the government deficit. Whether the budget cuts effected were sufficient to stabilize the exchange rate in the long run and to halt the inflationary process is a moot question. The package deals lacked prior synchronization of the main relative prices and, when they were embarked upon (particularly in the second package deal), prevailing relative prices were apparently such as not to be sustainable for long. In addition, there was no effective nominal anchor to which the price level could adjust, and no steps were taken to allow for rapid adjustment of the rate of various price increases to the development of the nominal anchor.¹

¹ The term “nominal anchor” refers to the exogenous and controlled determination, in nominal terms, of a major economic variable, such as the money supply or the exchange rate. It is assumed that any

The package deals lacked the highly important synchronization of the rate of price increases with the exchange rate and wages. Throughout the period in which they were in force, the rate of devaluation set by the Bank of Israel (7–10 percent per month) was much higher than the target rate of inflation. This rate of nominal devaluation, chosen because it was feared that the budget cuts would not suffice to stabilize prices and that the package deals would fail, could not yield real depreciation of the currency amounting to the difference between it and the target inflation rate—such a degree of real depreciation would have required very substantial contraction of aggregate demand and corresponding changes in the composition of aggregate demand and domestic product. Such changes are not feasible in the short run, and are indeed undesirable. The nominal devaluations therefore caused cost pushes which threatened to have an adverse effect on the real economy, and led to a recurrent departure from the original targeted rates of price rises.

Furthermore, the wage agreements were not consistently adjusted to the targeted rate of inflation. Wage agreements in Israel have two main components: (1) nominal wage increases, at rates and on dates agreed in advance for the duration of the wage contract; and (2) the automatic partial linkage of wages to the Consumer Price Index. The two components together reflect the inflationary expectations of the negotiating partners, and are an attempt to set average real wages at a desired level for the duration of the labor contract. When actual inflation deviates from the rate implied in the wage agreement, the result is short-term changes in real wages.² This structure of the wage agreements makes it difficult to reduce inflation below the rate implicitly assumed in them without causing a short-term increase of real wages, a deterioration in the balance of payments, and possibly also a rise in unemployment. A disinflationary program therefore requires wages to be adjusted to the targeted inflation rate at the outset.

Another problem relating to the coordination of wage movements with the disinflationary program arises from the impact on wages of a cut in the government deficit obtained by increasing net indirect taxes. Net indirect tax increases raise consumer prices; this entails automatic wage compensation and results in real wages which, from the perspective of business firms, are too high.³ The package deals took account of this problem by matching the subsidy cuts with corresponding cuts in the cost-of-living allowance.

The period of the package deals highlighted the crucial importance of synchronizing all parts of a disinflationary program; in addition, it held several important lessons for the implementation of the stabilization program.

change in prices that does not conform with the changes in this variable will then automatically bring into play corrective market forces. The efficacy of a nominal anchor is the greater, the more it is subject to policy control, the greater its economic importance, and the more rigidities are removed that hinder the rapid adjustment of prices to the nominal anchor.

² In the past, this structure of the wage agreements held a temptation for economic policy to accelerate inflation and thereby to erode real wages and improve the balance of payments. This policy generally succeeded in the short run, but entailed the re-opening of the wage contracts and their adjustment to the new rate of inflation. This often accelerated inflation, without yielding any real improvement in the balance of payments.

³ Full indexation shifts the taxes to firms (i.e. to returns to capital), while zero compensation distributes the burden of higher indirect taxes between returns to labor and returns to capital.

The experience of the first package deal shows that the rate of inflation can (for a short time) be brought down drastically in short order. An administrative price freeze and the imposition of price controls play an important role in such an abrupt slowdown of inflation. High concentration in wholesale and retail marketing contributes to the efficacy of price controls. Large firms are unlikely to risk breaking government regulations and competition forces others to follow suit. This, however, can only last as long as the administratively set prices do not deviate too far from the prices that would have been determined in the free market, and as long as these prices do not cause firms greater losses than they are prepared to sustain. A price freeze, in other words, is feasible only after prior synchronization of relative prices. When the inflationary process is marked by considerable inertia, which makes it persist in the short run even after its causes have been eliminated, a price freeze plays an important role.

When the first package deal was signed, relative prices were apparently fairly well adjusted. A few days before the agreement came into force, subsidies were cut and their effect on prices was excised from the cost-of-living agreement. Furthermore, in the period preceding the package deal, many businesses adopted the practice of quoting their prices and doing their costing in dollars. In part, this enabled firms to correct for the deficiencies of market information caused by high inflation, and in part made it possible to maintain a reasonable set of relative prices at any point of time.

The partial success of the first package deal may be attributable to the combination of favorable opening conditions (with respect to relative prices) with the freeze on prices and their control. The package deal succeeded so long as no cost pressures accumulated as a result of the continuing devaluations (which did not become real depreciation, for the reasons set out earlier), and in consequence of the payment of cost-of-living allowances for past price increases.

By contrast, the initial conditions for the second package deal were unfavorable. Relative price distortions had accumulated in the course of the first package deal. Price controls were apparently also less effective, for when prices are set on a predetermined upward path, they are more difficult to control than under a complete freeze, which makes it possible for the public to know clearly what the official price is.

It should be emphasized that price controls on a wide range of goods and services cannot be maintained for long before increasingly harmful relative price shifts set in; these reflect ongoing real changes and cannot be monitored. Moreover, if the price freeze is imposed when inflation is high, it is difficult to believe that the controls started out from a correct set of relative prices, even if there was an attempt at prior synchronization.

Prolonged price controls cause additional damage in that they make the commercial success of firms dependent upon the ability of their managers to obtain official approval for price increases. In the long run, this may be no less damaging than the direct detrimental effects of price controls on the real economy.

3. THE STABILIZATION PROGRAM OF JULY 1985

The stabilization program launched at the beginning of July 1985 had three objectives: (a) to halt the inflationary process; (b) to increase the foreign reserves and improve the current account; (c) to lay the ground for the resumption of economic growth. On the whole, the program has so far succeeded impressively in arresting inflation; as stated earlier, the inflation rate has been reduced drastically since August.

The program was initiated with a large devaluation (of 18.8 percent). It was decided to stabilize the exchange rate at around IS1,500/US\$1. The government did not commit itself to any specific duration of this fixed exchange rate. Its maintenance was made conditional on economic developments, especially with respect to wages. The prices of most goods and services were raised by 17 percent, except for subsidized goods and services, whose prices were raised by up to 100 percent (most—between 45 and 75 percent). The cost-of-living agreement was suspended, and no compensation was paid for the price increases of May and June; for the 27 percent price rise of July, partial compensation of 14 percent was paid. Staged nominal wage increases were agreed in advance for the period up to February 1986, and it was agreed that a new cost-of-living agreement would come into force in October 1985.⁴

The government adopted no detailed decision with respect to monetary policy, but the documentation prepared for its discussions of the program recommended, as a first step, that the real volume of total bank credit be reduced by 10 percent, and then kept at the same nominal level. It was decided that if the nominal interest rate on overdraft facilities rose to over 25 percent a month, the central bank would intervene starting from the second month of the program. New deposits in Patam (dollar-denominated) demand accounts were no longer allowed.

In addition to monetary restraint, the program contained fiscal measures to curb demand so as to improve the balance of payments and support the process of halting inflation. These measures included a cut in public consumption, the reduction of private disposable income through tax increases, and subsidy cuts (or, put differently, an increase in the government's net revenue).

There is a close interconnection between these three objectives of the program. The damage caused by inflation, at the rates that have prevailed in Israel during the last decade and especially in 1984, is difficult to quantify; it is, however, generally accepted that it has been great. Its effect on GNP growth has been serious and there are adverse balance-of-payments effects as well. In the short run, the "noise" generated by inflation is a hindrance in dealing with the economy's real problems, and indeed makes it difficult to identify and quantify them. The cumulative balance-of-payments deficit is not only a serious problem in itself—it also diminishes the

⁴ The consumer price index for July rose by 27 percent, and the compensation paid for it was 14 percent. In August, a one-time wage increment of 12 percent for one month was paid. In December, January, and February, wage increments were paid of 4, 4, and 3 percent, respectively. The new cost-of-living agreement, in force from October 1985, provides for compensation at the rate of 80 percent of inflation (on the basis of September) once in three months or whenever the price rise amounted to 4 percent.

confidence of the public (at home and abroad) in the country's economy. The long-term stabilization of the exchange rate—a necessary condition for price stability—is impaired or perhaps prevented altogether. The importance of economic growth is obvious; it is enough to say that it is much easier to cut the government deficit when the business sector is growing rapidly than when there is stagflation. Furthermore, the government deficit is the main cause of the balance-of-payments deficit, which has an indirect effect on exchange-rate and inflation policy. The government deficit also directly raises the price of non-tradables by increasing the demand for them.

The stabilization program set itself the objective of simultaneously halting inflation and improving the balance of payments. This distinguishes it from previous disinflationary programs which addressed themselves to one or the other but not to both. The program's treatment of the exchange rate represents a turning point in the view that had influenced economic policy since the early 1970s. The previous approach saw nominal devaluation as the central instrument for reducing the import surplus. The prevalent argument was that any use of the exchange rate as a policy instrument for reducing inflation would cause a deterioration in the balance of payments. Therefore, devaluation could only be slowed after inflation had been reduced by curbing excess demand in the economy. This approach ignored the fact that in an open economy there is no direct and close connection between excess demand and inflation, but that there is such a connection between devaluation and inflation.

The stabilization program adopted a different approach: it held that—combined with appropriate measures in the real economy—the rate of exchange could be used as an instrument for halting inflation, and at the same time improve the balance of payments, an improvement to be achieved by reducing domestic demand. Cutting the government deficit was intended to contract public demand directly and indirectly to cut private consumption by reducing disposable income (on the assumption that the level of private consumption is in the short run determined by disposable income). The contraction of demand was to be supported by a restrictive credit policy. The inflationary process was to be halted by reliance on nominal variables, supported by the contraction of demand and the expected improvement in the balance of payments.

The designers of the program tried to avoid the mistakes made in the package deals by their failure to synchronize prices. In the second half of June, prices of goods and services were allowed to rise so as to relieve cost pressures that had accumulated during the package deals and to arrive at reasonable relative prices.

In order to prevent a cost push from the real wage rise that resulted from the slowdown in the rate of inflation, and at the same time to permit subsidy cuts without in turn generating pressures on wages and costs, real wages were eroded sharply at the beginning of the program by the suspension of the cost-of-living agreement. The price rises of May, June, and July came to 56 percent (27 percent in July), but only 14 percent compensation was paid in the July wage. As a result, the purchasing power of wages fell by 27 percent. The decline in labor costs to employers was smaller because part of the price increases was the result of subsidy cuts, but it nevertheless came to no less than 20 percent.

As stated, when inflation falls below the rate implicitly expected in the wage agreements, there is an unexpected rise in real wages. One way of returning to the planned real wage level is through one-time erosion of real wages when inflation begins to slow down. The initial wage erosion exceeded that which was required to maintain the level of real wages tacitly assumed in the wage agreements, and was also more than was needed to prevent the subsidy cuts from being shifted to firms. This excess wage erosion was in part originally planned to be temporary, and seems to have been designed as a means of restraining demand. In part, it reflects the belief that the average real wage level set earlier was too high. The data show that the same wage erosion might have been obtained with a lower price rise, and that the devaluation of July 1, with the immediate price adjustment that accompanied it, did not contribute significantly to the erosion of wages.⁵

The price rises of June and the wage erosion brought about a reasonable synchronization of relative prices at the starting point of the program. The main failure of the two package deals considered together was not caused by unfavorable opening conditions. It stemmed from the lack of an unambiguous nominal anchor, and the failure to coordinate the movement of different prices in relation to one another, and of all together — to the change in the nominal anchor. The lack of synchronization between the exchange rate and the targeted price rise was, as stated, the result of the fear that the cut in the government deficit might not be sufficient to achieve price stabilization.

During the stabilization period, the designers of the program intended to use three nominal anchors simultaneously: the exchange rate against the US dollar, which was stabilized at around IS1,500; wages, for which a nominal growth path was set until October 1985; and total bank credit, which was to be cut by 10 percent in real terms at the outset of the program, and then remain constant in nominal terms. Three nominal anchors cannot be sustained simultaneously in the long run. In the short run, the intention was that they should support each other. Together with the price freeze, they were meant to arrest the inflationary process. It was expected that the real damage caused by inconsistencies between the three anchors would be small by comparison with the gains from halting inflation and improving the balance of payments. The success of such an attempt depends on the measure in which the three anchors selected are mutually consistent, and on the adjustment of all three together to the (frozen) price level at the beginning of July.

Wages are by nature not a convenient nominal anchor. They are set in decentralized negotiations in thousands of firms, and the collective wage agreement is at most a threshold for specific wage settlements. Predictably, by the end of the year, business sector wages had risen substantially above the level provided for in the wage agreement (see Chapter IV). Moreover, the agreed wages served as a nominal anchor only until October. From then on, as the new cost-of-living agreement came into force, wages again became dependent on the movement of prices.

⁵ Exactly the same result might have been obtained by a 3 percent devaluation and zero cost-of-living compensation in July. The devaluation also served, in some small measure, to unify effective exchange rates. It further sought to obtain (at least for a short while) a real depreciation of some 2 percent. These last two objectives might also have been achieved by a devaluation of 3 percent.

The program intentionally set the nominal volume of credit at a level that was low relative to the price level as frozen at the beginning of July and relative to the level of economic activity at the time. The intention was to bring about, by monetary restraint, contraction of demand at the beginning of the program, so as to support price stabilization and to protect the balance-of-payments position. The program's planners preferred to set the volume of credit at a low level that would be sure to reduce GDP rather than risk an excessively high volume of credit that would be sure to damage the balance of payments. In the event, the real balance of short-term bank credit did not fall, and the marginal real interest rate rose drastically, which might have indicated a rise in the demand for credit. The actual volume of credit set prior to the program eventually became inadequate, despite high real interest rates (about 40 percent p.a.) which appear to have expanded credit rather than contracting it because they increased borrowers' indebtedness (the reasons for this are explained in Chapter VIII). The high interest rates reduced GDP to an extent which is difficult to measure. In consequence, the Bank of Israel came under considerable pressure to reduce the real rate of interest. The volume of credit was in fact abandoned as a nominal anchor and replaced by a credit policy that endeavored to control the volume through the real interest rate, while keeping the latter to a planned rate of decline.

The only nominal anchor that has so far been maintained as planned is the dollar exchange rate. The choice of the dollar (which fell in the second half of 1985 against the other major currencies) as a nominal anchor resulted in a slow and gradual depreciation against the European currencies, with a corresponding creeping cost push in the Israeli economy. This, however, does not mean that the entire burden of slowing inflation was shifted to the exchange rate. The slowdown of inflation was the combined result of the freeze of the dollar exchange rate, the price freeze, the initial erosion of real wages, the contraction of demand caused by the cut in the government deficit, and the restrictive monetary policy. The contribution of the last two factors was particularly reflected in the improvement of the balance of payments, and enhanced the public's confidence in the stability of the exchange rate.

The erosion of real wages at the beginning of the program was adapted to the program's opening conditions. Wage changes since then were intended to overcome the problem of adjusting wages to the declining rate of inflation so as to avoid balance-of-payments deterioration. However, the manner in which the adjustment of wages was effected did not guarantee this result in advance, nor does it promise to be maintained in the future. According to the present wage agreement, real wages remain a function of inflation. A rapid fall in the inflation rate, together with some subsidy cuts did result in a rapid rise in real wage costs. Taken together with the wage increases granted in the business sector, the fall in labor costs of the initial stage of the program was later almost completely wiped out (see Chapter IV). One reason for the sharp fall in real wages and the subsequent recovery is the preference of all parties concerned (government, workers, and employers)—each with its own reasons—for an arrangement under which real wages and the distribution of the burden of subsidy cuts are not determined in advance. The parties prefer to leave these to be eventually set by a very uncertain variable—the actual rise in prices. If inflation had fallen faster—for example through adoption of the exchange rate against the

currency basket as the nominal anchor — the stabilization program might very well have run into difficulties on the wage front as early as the beginning of 1986.

The approach adopted in the program is consistent with the overall policy of the government and the Bank of Israel, which aims at reducing indexation as far as possible. This is evident in the capital market as well as for wages and credit (and also in the fact that the quoting of prices in foreign currency was banned). The argument against indexation addresses itself to three of the main implications for the inflationary process: (a) indexation passively supports the inflationary process by making the rapid adjustment of nominal variables possible, so that it becomes easy for the system to accommodate itself to any rate of inflation; (b) that indexation of wages prevents rapid adjustment of relative prices to external shocks, such as the oil crisis or massive cuts in subsidies; (c) that the existence of linked financial assets enabled the public to adjust its liquidity automatically and at no cost or, in other words, to avoid paying an inflation tax. Liquidity shortage therefore ceased to be an effective stabilizer of the price system.

The advocates of indexation hold that it eases the synchronization of prices: linkage to the CPI or the exchange rate permits reasonable relative prices in the short run. By this reasoning, the program could from the start have dispensed with wages and the volume of credit as nominal anchors and could instead have set the desired level of real wages and interest directly. This would have solved the problem of synchronizing wages and credit with the exchange rate and the price level which were frozen at the beginning of July. Part of the real cost to the economy of coordinating the various nominal anchors⁶ would thus have been avoided, probably without straining the balance of payments. It is difficult to believe that taking the eve-of-program interest rate as a target would have stimulated excess demand (for inventories or goods and services for current use) on a scale that would have jeopardized the balance of payments or price stability. Speculative purchases of foreign currency (which were a cause for concern) could also have been blocked, had they occurred, by linking the monetary loan to the exchange rate. Indexation may also be useful in the near future, if the stabilization program is exposed to shocks — for example, once price controls are lifted. Such shocks may generate expectations of devaluation and hence a decline in the foreign reserves, which in turn may elicit a monetary policy reaction, and so forth. Indexation to the exchange rate, on the other hand, would blunt speculation against the foreign reserves and prevent it automatically.

Another argument is that linkage causes the government to lose the inflation tax. In the Israeli economy this tax is probably of little importance: the issue of a linked money substitute serves the government as a means to finance public expenditure. If the public is to be induced to buy unlinked government bonds rather than linked assets (such as Patam demand deposits), the government has to pay the public the real interest rate prevailing in the market, as well as a premium representing expected inflation and a risk premium for the possible deviation of actual from expected inflation. The abolition of indexation would yield the government a net gain (and

⁶ It is reasonable to assume that the desired levels of real wages and the real interest rate are better founded than the forecast of their nominal paths, which will converge, together with inflation, to their desired real levels.

generate anti-inflationary forces) only if the risk premium were smaller than the inflation tax on the money base. On conventional assumptions, this would not necessarily happen. Moreover, when the government seriously intends to halt inflation and stabilize the exchange rate (and thereby forgo inflation tax), whereas the public has little confidence in it and demands a risk premium, the budget deficit would increase once indexation is abolished.⁷ This may in fact have happened in the second half of 1985. In summary — those in favor of indexation argue that if its elimination has merits in the long run, its partial abolition was improperly timed.

As stated, the Bank of Israel was opposed to the use of indexation during the stabilization period.

The reduction of the government deficit is an important component of the program, because of its considerable impact on the balance of payments and the inflationary process. Some of the budget cuts effected in 1985 were not permanent, and the improvement in various components of the balance of payments was in part due to temporary factors. The future implications of these fluctuations for the inflationary process depend on the connection between the government deficit and inflation.

The Israeli economy is relatively open to the movement of goods and services, and foreign trade has a high weight in total economic activity. In such an economy, a stable government deficit does not necessarily cause persistent inflation as long as the government can finance the entire deficit from domestic borrowing and by sales to the public of foreign currency obtained from stable sources.⁸ In recent years, as the domestic and foreign debt grew large, the government encountered difficulties in financing its deficit from stable sources. The mirror image of these difficulties was the dwindling of foreign reserves and the difficulty of financing the balance-of-payments deficit. The 1985 cut in the deficit not only enabled the government to finance it from stable sources, but also to repay short-term foreign loans and at the same time increase the foreign reserves. A slight future increase in the deficit — with the same conditions for financing it — may therefore be expected to work itself out in a nonrecurring rise in the prices of nontradables. The result would be real appreciation of the currency. A first approximation of the effect of a higher deficit on the price level is the rate of the real appreciation multiplied by the weight of nontradables in total use of resources. The product of the two is very small and should thus not be detrimental to the stability of the general price level. The critical variables are therefore the government's ability, in the near future, to finance its deficit from stable sources and its success in gaining the public's confidence and thus prevent speculation against the currency.

4. SPECIFIC PRICE CHANGES

The prices of controlled goods and services rose in the course of 1985 by 252 percent, as against 172 percent in the other components of the Consumer Price Index.

⁷ The comparison is with a situation in which inflation is halted while short-term assets linked to foreign currency remain in existence.

⁸ This is now the case in Belgium, for example.

Most of the price rise of controlled goods took place in the first half of the year and reflects the subsidy cuts in this period.

In the second half of 1985, and particularly if July is excluded, prices rose slowly. The main contribution to the rise of the CPI in this period came from the prices of fruit and vegetables.⁹ The rise in fees and other charges for education and health (which was equivalent to a cut in transfer payments) also contributed. So did, to a lesser degree, the price increases of winter clothing and footwear, which for technical reasons fall in this period. The slow rise of prices continued into the first quarter of 1986. Particularly noteworthy is the stability of food prices other than fruit and vegetables: between August 1985 and March 1986 they rose by no more than 4 percent, or 6.5 percent in annual terms. Part of the price increases in the first quarter of 1986 resulted from the upward adjustment of prices of controlled goods to adjust to price increases abroad, and part was the result of subsidy cuts.

Before proceeding to analyze the price indexes and the significance of their changes, a short technical introduction is indicated to elucidate the way in which they are affected by changes in the nominal interest rate. In all the price indexes compiled by the Central Bureau of Statistics, except the Consumer Price Index, the imputed interest on the credit extended by the seller to the buyer is deducted from the recorded price. The deduction is carried out automatically in the sample of prices. Each sales transaction in the sample is supplemented by details of the payment flow involved. This flow is discounted to the date of sale and the present value so obtained is the price to which the index refers. The discount factor is calculated from a moving average of the mean interest rate on overdraft facilities. The continuous decline in the nominal interest rate in the second half of 1985 and in early 1986 is thus perceived as — and indeed is — a rise in the buyer's price (and increased revenue for the seller).

The price rise recorded from August 1985 in the wholesale index of industrial output is almost entirely the result of these changes in the interest rate. The same is true for the input indexes, but to a lesser extent, because they were also affected by the wage rises during the period and by increases in government fees and licenses.¹⁰

If the decline in interest rates had been the only change, firms would presumably have reduced their prices accordingly. However, in the period under review there were also other changes, the most important of which was the rise in the price of inputs as a result of the depreciation of the sheqel against the currency basket.¹¹ The price controls did not permit firms to raise prices in line with this depreciation.¹¹ However, since the rises warranted by the depreciation were offset by the fall in the interest rate, the cost pressure that had built up as a result of devaluation and price

⁹ Apparently as a result of factors on the supply side that were unique to this year.

¹⁰ The effect of the interest rate on the price indexes was calculated at the level of the plant (and sometimes the commodity). This makes it impossible to separate out the influence of this variable. In order to obtain an estimate of its magnitude, the calculation was made under various assumptions with respect to the average term of the credit, and on the assumption that during the period there has been no change in the customary credit terms.

¹¹ The price increase justified by the devaluation is not determined only by the import component of the product. For exports and import substitutes the appropriate price increase would be by the full rate of the devaluation.

controls was much smaller than would appear at first glance. Thus, for example, the wholesale price index recorded a rise of 11.4 percent in the last five months of the year. If the interest rate effect is excluded from this, the remaining price rise is negligible and reflects mainly the seasonal rise in the price of winter clothing and footwear. The rise in the wholesale price index is higher than the 6.4 percent devaluation against the currency basket in this period, and more than offsets the effect of the devaluation without generating cost pushes.

Between August 1985 and March 1986 the wholesale price index rose considerably faster than the consumer price index. The gap between the two was 7 percent. The wholesale index is generally considered as leading the Consumer Price Index, indicating changes to be expected in the latter. The technical explanation for the gap between the two indexes is to be found in the imputed interest described earlier. In part, the difference may reflect cost pressures at the retail level which are for the time being repressed by the price controls and will come into the open as soon as the controls are lifted. There are, however, several offsetting factors working in the opposite direction: (a) consumer credit exists also at the retail level, although the CPI does not measure it;¹² (b) it is generally assumed that under inflation at fluctuating rates firms will try to set their prices at a level high enough to provide a risk premium against unexpected changes in the rate of inflation. As a result, the profit per unit sold may be higher and the volume of sales smaller than under price stability. The expected fall in the profit rate once inflation is halted may offset the effect of falling interest rates on prices.

The fact that no goods shortages appeared suggests that the level at which prices were frozen in July was "reasonable." (It should be pointed out that price rises were approved in exceptional cases, which prevented the appearance of shortages). The strong pre-Passover competition of April 1986, when firms sought to attract customers by generous credit offers, also suggests that there is little danger of significant cost pressures once price controls are removed. Finally, the decontrol of a wide range of goods and services in February and March did not destabilize prices.

It should nevertheless be borne in mind that price controls may have caught some firms and products at prices significantly below the long-run level. Considering the unfavorable conditions by the end of the second package deal, it is possible and even probable that this was so. In addition, considerable time has elapsed since price controls were imposed, and there may have been cost changes, including price increases abroad, that warrant price increases. Any such rise will be reflected in the general price level. It is therefore to be expected that the lifting of price controls will result in a jump in the general price level. The main role of price controls in the stabilization process is, as stated, to break the inertia of inflation, and it is reasonable to suppose that nine months are a sufficiently long — and possibly to long — period to achieve this object. The longer price control is maintained, the greater will be the distortions caused by it, the higher will be the price jump when it is lifted, and the greater will be the risk of a shock that could set a new inflationary spiral in motion.

¹² This means that from the viewpoint of the consumer there has been a price rise that has not been captured by the Consumer Price Index.

APPENDIX: THE PROVISIONS OF THE PACKAGE DEALS

At the beginning of November 1984, an agreement for three months — best known as “the first package deal” — was signed between the government, the Histadrut, and the employers’ organizations, which contained the following main provisions:

The prices of most goods and services were frozen.

The government reserved the right to abolish subsidies.

The display of prices quoted in foreign currency was prohibited.

The cost-of-living agreement was amended so as to reduce the compensation for price increases (a third of the cost-of-living allowance due for November and December was not paid).

A monetary policy was adopted drastically raising real marginal interest rates.

The exchange rate was not frozen, and devaluation of the currency continued, albeit at a slower rate than before the package deal (7.5 percent per month on average, as against 16 percent per month before the package deal). In the second half of January the government exercised its right to raise prices by subsidy cuts.

The package deal was partially successful: in December 1984 and January 1985 prices rose relatively moderately (by 3.7 and 5.3 percent, respectively).

In mid-January, the parties to the package deal completed a second agreement which was to come into force on the expiry of the first, on February 5, 1985. With the beginning of the second package deal, price increases were approved, releasing some of the cost pressures that had accumulated in the course of the first. The second package deal abandoned the objective of halting inflation abruptly. Instead, the view of those who favored a gradual reduction of inflation was adopted. The rate of price increase (prices were to remain under control) was set at 3–5 percent per month for goods and services in general, and a maximum of 10–12 percent a month for subsidized goods. The second package deal also failed to adjust the exchange rate to the target rate of inflation, and in the first months of the second deal, devaluation reached 13 percent a month. The prices of subsidized goods were raised in February and again in March. These price rises partly reflected the government’s desire to reduce its expenditure on subsidies — which rose as a result of the increasing gap between the planned rate of price rise and the rise in costs — and partly were intended to achieve a further cut in government spending. The rise in the price of subsidized goods was accompanied by an additional neutralization of 6 percent of the cost-of-living allowance paid in April, thereby eroding real wages by 6 percent.

The widening gap between the rate of increase of costs and prices made it impossible to adhere to the original program. In early April, a partial adjustment of prices was approved. This included price increases, further subsidy cuts, and a new agreement for a complete price freeze for two months, but no freeze of the exchange rate or of wages. As a result of the sharp price rise in April, which partially released cost pressures, and the renewed price freeze, prices in May rose comparatively slowly — by 6.8 percent. This precluded the payment of a cost-of-living allowance in June. By the end of the two-month agreement, at the beginning of June, there were further subsidy cuts, and at the end of June further price increases were approved in anticipation of the launching of the comprehensive stabilization program of July 1.