# CHAPTER VII

# ISRAEL AND THE WORLD ECONOMY

## 1. MAIN DEVELOPMENTS

In several important respects the world economy continued to revert to pre-OPEC "normalcy" in 1979. Although real oil prices remained several times above their 1973 level, the terms of trade, after several years of stability, moved significantly against the oil exporters (by about 10 percent). Due to rising OPEC imports, fuel economy, and expanding oil production outside the cartel, the OPEC current account surplus shrank to pre-1973 levels (approximately $10 billion), and the OECD bloc returned to its usual position of a major net capital exporter to the developing world. In addition, by 1978 the industrial world as a whole had finally (and belatedly) shaken off many, although by no means all, of the symptoms of the lingering depression which the original OPEC oil price shock had done much to bring about.[1]

During 1979 the hesitant recovery of real growth in Europe and Japan (which had stumbled badly in 1977) continued to gather steam, while the U.S. economy, whose recovery had been more vigorous and sustained, moved toward a new policy-initiated slowdown induced by the recurrent problem of rising rates of inflation during a cyclical boom.

This relatively peaceful, if problematic, scene was interrupted by a second OPEC oil price explosion, one equal in magnitude and potential damage to the first. Unlike the first, this assault on the world economy was set off in a rather disorganized manner, by an eager desire to capitalize on the speculative panic induced by the (obviously unplanned) Iranian revolution.

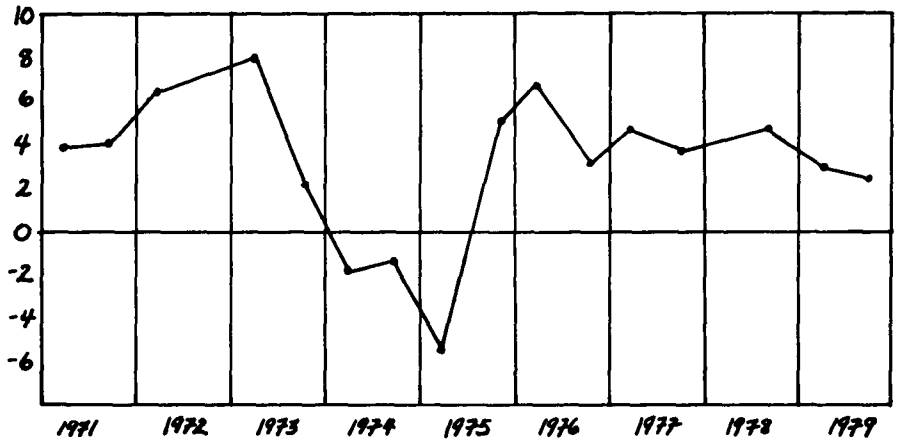
The leapfrogging series of oil price rises from the end of 1978 to January 1980 is estimated to average about 120 percent (a real rise of about 100 percent). Although 1973-74 saw a fourfold boost, the latest round, starting from a much higher real base, is quite comparable. It implies (on various estimates) a rise in OPEC's current surplus of $95 billion to $135 billion (in 1980), about 2-3 percent of the GNP

[1] Recovery was far more complete in North America than in Europe or Japan, as may be seen from the unemployment data and growth rates in Tables VII-1 and V11-2.

Figure VII-1

**REAL GNP GROWTH RATES IN SEVEN MAJOR OECD COUNTRIES, 1971-79**

(Percentages; half years at annual rates)




Source: OECD, *Economic Outlook*, December 1979.

of the industrialized oil importing countries, and a direct increase in their price levels of about 4 percent. 1979 witnessed somewhat less than half of these total effects.

The two impacts noted—on the trade surplus and on the price level—summarize the deflationary effect of OPEC's action on the world economy. The rise in the OPEC surplus drains income and, hence, consumption demand in the same manner as would an increase in the fiscal surplus of the local governments (and, like such an increase, its demand effect is partially offset by its tendency to increase world saving and loanable funds, and thus reduce interest rates). The escalation of price levels (possibly because of widespread negative inflexibility in wages and other nominal prices) means, however, a reduction of the real money stock, which shrinks real demand both directly (the negative asset effect) and by raising interest rates.

These depressive income and real money effects of the new OPEC coup combined with the trend toward tighter monetary policy (since late 1978) in the U.S. and Canada to bring about a near halt in real GNP growth (less than 1 percent during the year). In Europe and in Japan where, as noted, growth was on an upswing, the initial impact of the new oil price shock can mainly be observed in rising

Table VII-1

GROWTH OF REAL GNP IN OECD COUNTRIES, 1960-79
(Percent change, seasonally adjusted annual rate)

| | 1960-72 | 1978 | 1979 | 1978 Second half | 1979 First half | 1979 Second half |
|---|---|---|---|---|---|---|
| U.S.A. | 4.2 | 4.4 | 2.0 | 5.2 | 1.3 | 0.3 |
| Japan | 10.9 | 5.6 | 6.0 | 4.3 | 6.8 | 6.3 |
| Germany | 4.9 | 3.5 | 4.5 | 5.0 | 3.9 | 4.0 |
| France | 5.9 | 3.3 | 3.0 | 2.8 | 3.0 | 3.0 |
| U.K. | 3.3 | 3.3 | 0.5 | 3.5 | 0.3 | -2.3 |
| Italy | 5.6 | 2.6 | 4.0 | 4.6 | 4.2 | 3.3 |
| Canada | 5.1 | 3.4 | 2.8 | 3.9 | 3.2 | 0.5 |
| 4 large European countries | 5.0 | 3.3 | 3.0 | 4.1 | 3.0 | 2.5 |
| Total above countries | | | | | | |
| OECD weights | 5.5 | 4.2 | 3.3 | 4.6 | 3.1 | 2.3 |
| Israel export weights | | 4.0 | 2.9 | 4.5 | 2.6 | 1.6 |
| Other OECD | 5.5 | 2.3 | 3.0 | 3.0 | 3.0 | 2.8 |
| Total | **5.5** | **3.9** | **3.3** | **4.3** | **3.1** | **2.3** |

Source: OECD, *Economic Outlook*, December 1979.

inflation rates in the second half of the year.[2] But this, together with a general tightening of monetary policy during 1979, provides the clear prospect of a very real slowdown in 1980.

Although Israel's economy was hit by the new oil shock no less than others, this additional blow had relatively less effect in destabilizing its macro-economic balance. As in some other countries (e.g. the U.K. and the U.S.), but to a greater degree, this balance was already thoroughly upset by other, largely domestically generated, factors. In Israel it was the unprecedented escalation of double digit inflation to triple figures which induced repeated counterattacks by both monetary and fiscal policy, leading toward the end of the year to the relapse of the economy into the recession from which it had only begun to recover in 1978. Consumption and import demand plunged and unemployment statistics (labor exchange data) began a steep climb.

[2] Some slowing of growth was already apparent in Europe in the second half as well (see Table VII-1)—from 4.1 percent in the second half of 1978 to 2.5 percent in the corresponding half of 1979, but this was mainly due to the special circumstances affecting the U.K. (discussed in the next section).

**Table VII-2**

**UNEMPLOYMENT RATES, 1964-79**

| | Average | 1979 | | | IMF data | |
|---|---|---|---|---|---|---|
| | 1964-73 | I | II | III | 1978 | 1979 |
| U.S.A. | 4.4 | 5.6 | 5.6 | 5.7 | 6.0 | 5.8 |
| Japan | 1.2 | 2.0 | 2.1 | 2.2 | 2.3 | 2.1 |
| Average 4 European countries | 2.3 | 5.1 | 5.1 | 5.1 | 5.3 | 5.4 |

Source: OECD, *Economic Outlook*, December 1979, Tables 7 and 13.

**Table VII-3**

**MEASURES OF FISCAL IMPACT, 1977-79**

| | Effect of direct tax change on private disposable income (%) | | | Change in fiscal balance as a percent of previous year's GNP | | |
|---|---|---|---|---|---|---|
| | 1977 | 1978 | 1979 | 1977 | 1978 | 1979 |
| U.S.A. | -1.4 | -1.3 | -0.7 | -1.1 | -1.0 | -0.3 |
| Japan | 0.3 | 0.1 | -0.5 | 0.3 | 1.2 | -0.1 |
| Germany | -0.8 | 0.6 | 0.5 | -0.7 | 0.2 | 0.3 |
| France | -0.3 | 1.1 | -0.3 | 0.5 | 0.6 | -0.2 |
| U.K. | 1.8 | 2.4 | 1.9 | -0.4 | 0.3 | -0.6 |
| Italy | 0.1 | 0.4 | -0.8 | -0.7 | 0.7 | 0.3 |
| Canada | 1.0 | 2.7 | -0.1 | 0.6 | 0.5 | -0.5 |
| Total, above | **-0.6** | **-0.1** | **-0.3** | **-0.6** | **-0.1** | **-0.2** |
| 4 major European countries | **0.0** | **1.1** | **0.4** | **-0.3** | **0.4** | **0.0** |

Source: OECD, op. cit., Tables 5, 17.

## 2. THE CYCLICAL STATE OF THE WORLD ECONOMY

The new oil price shock described above was superimposed upon an upward trend in the rate of inflation in two major economies, the U.S., where a creeping rise had persisted since 1976, and the U.K., where a rebound of wages and prices followed the abolition of controls and a sharp increase in indirect taxation (VAT) by the incoming government. In both countries, demand policies (especially monetary policy) had swung against the rising inflation. The addition of the oil

shock, however, intensified the deflationary climate which the conflict of policy and price trends had already engendered.[3]

In the other major economies (continental Europe and Japan), no such rising inflation trend was apparent. Partly as a result of this, demand had not been under pressure from monetary and fiscal policy. On the contrary, leading (i.e. 1978) monetary growth had been intentionally expansive (see Figure VII-2), and these countries had, on the whole, arrived in 1978 and 1979 at growth rates at, or slightly above, their secular levels after years of growth below capacity and a creeping uptrend in unemployment.[4]

The present episode was only an early stage in late 1979. It remains to be seen how closely policies and outcomes will replicate the earlier recessionary sequence. Most indications are, however, not encouraging. In principle, Europe and Japan confront the second oil price explosion with lower inflation rates than they did the first in 1973, and thus should feel less need to impose deflationary demand pressure. However, their 1979 monetary and interest rate policies did not seem to reflect this fact.[5] Another positive factor is that the U.S., at least, appears to have progressed somewhat in its ability to avoid by voluntary incomes policy a spillover of the temporary peaks of inflation into wage claims and the ongoing inflation rate.

Tables VII-3 and VII-4 and Figures VII-2a and 2b reveal that the changes in real growth in 1979 were influenced predominantly by the increase in "oil deficits", but also by monetary policy and price developments.[6] Table VII-3 shows that fiscal policy was essentially neutral, with a very slight bias towards restraint (net fiscal balances tightened by 0.2 percent of GNP, while changes in taxes cut private disposable incomes by 0.3 percent). In the next year (1980) the OECD expects a shift in the opposite direction, but simply in response to the automatic stabilizer effect of constant tax rates during a recession.

[3] The positive inflation trends in these countries, especially the U.S., and rising growth elsewhere, were also related to an upward trend in world commodity prices (see Table VII-7). However, the commodity price rise was far less steep than that of 1973.

[4] After the previous oil shock it became clear that the initial increase in world saving created by the income transfer to OPEC was more than offset by the cyclical and then policy-induced reduction in public sector saving in the industrial countries. This, however, was a result of the recession itself, not a necessary implication of the transfer. (Moreover, world saving was recovering with the gradual ending of the recession.)

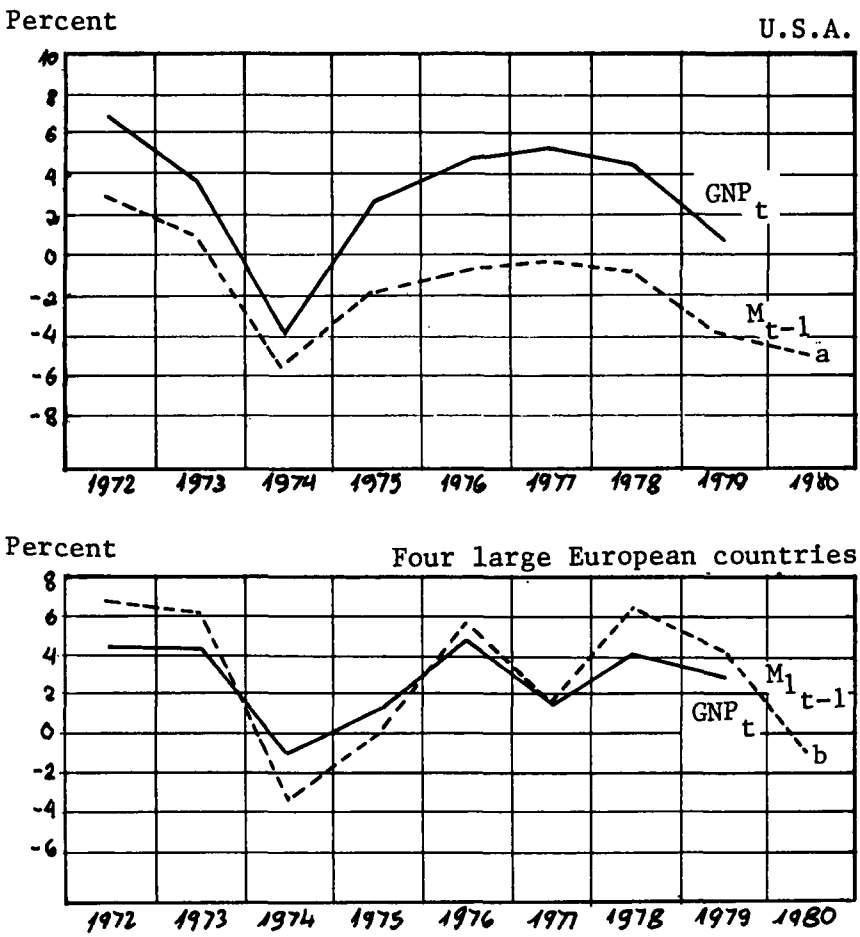
[5] It is important to note qualitatively (we shall not attempt to quantify the point here) that both the higher monetary growth rates of 1978 and the very low recent monetary growth rates in Europe and, even more, in Japan, owe a good deal to the traditional tendency of these governments to oppose the exchange market trend of the dollar (first down and then upward). This is also apparent in the interest rate competition which has developed in February and March 1980—with severely deflationary implications.

[6] Figure VII-2 shows specifically that real GNP growth rates are strongly correlated with $M_1$ growth in the preceeding year, deflated by the price change in the currency year. See, for example, OECD, *Economic Outlook*, December 1979, Chart D (using real $M_2$).

Figure VII-2

## REAL GNP GROWTH IN CURRENT YEAR (t) AND REAL MONEY GROWTH IN PREVIOUS YEAR (t—1), 1972-80

(Percent fourth-quarter-to-fourth-quarter changes)




Note: Preliminary estimates for 1979 and 1980. $Money_{t-1}$ equals nominal $M_1$ in previous year divided by price change (CPI) in current year (percent change in $M_{t-1}/P_t$).

[a] 1980 = $\frac{\%\Delta M_{1b79}}{P_{79}} \cdot M_{1b}$ = $M_1$ adjusted for new checkable saving accounts (15 percent in 1979).

[b] 1980 = $\%\Delta M_{79}/P_{79}$. The $\Delta M_{79}/P_{80}$ is likely to be still more negative, in view of the larger $\Delta P$ probable in 1980.

Table VII-4

## GROWTH OF MONEY SUPPLY ($M_1$) IN SIX MAJOR ECONOMIES

(Percentages, annual rates)

| | Increase in fourth quarter as against same quarter year before | | | 1979 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1976 | 1977 | 1978 | I | II | III | IV | Year | Last month |
| U.S.A[a] | 5.8($M_1$) | 7.9 | 7.2 | -1.3 | 8.4 | 10.1 | 5.8 | 5.7 | 12 |
| | 6.0($M_{1b}$) | 8.1 | 8.2 | 4.9 | 11.2 | 10.5 | 5.4 | 7.7 | 12 |
| Japan | 14.7 | 6.1 | 12.3 | 7.7 | 21.8 | 0.7 | -5.9 | 3.0 | 12 |
| Germany | 6.5 | 10.4 | 13.5 | 12.9 | 0.0 | 1.0 | | 4.0 | 12 |
| France | 10.7 | 9.2 | 11.9 | | | | | 11.5 | 10 |
| U.K. | 10.3 | 21.9 | 16.5 | 7.5 | 5.3 | 12.6 | | 7.5 | 1 |
| Italy | 20.6 | 20.4 | 25.3 | 17.7 | 25.5 | | | 24.5 | 10 |
| 4 major European countries | 10.4 | 13.7 | 15.3 | | | | | 9.7 | |

[a] In 1979 the introduction or spread of new checkable (interest-bearing) savings accounts is estimated to have reduced this figure by 1.8-2 percent. The Federal Reserve therefore introduced a new measure in early 1980, $M_{1b}$, which includes these accounts ("NOW", "ATS").
In this chapter Table 4 and Figure 2 are adjusted to this aggregate.

The slowing of monetary growth in the U.S. in late 1978 did not produce the clear-cut recession in 1979 which was widely expected (see the 1978 Annual Report). Rather, roughly static monetary growth permitted a rising cyclical price trend, energy price decontrols, and the first waves of the new oil shock to generate a severe growth recession (GNP rose only 0.8 percent during the year and 2 percent year on year). Despite excessive stress in the failure of a formal recession, this was in fact a drastic cyclical slowdown from the 4.8 percent rate during 1978. The U.S. government forecast (in its January economic report) a mild recession during only the first half of 1980. Even at that time this appeared to be an optimistic outlook. Since then, however, the first impact of the late 1979 round of oil price increases pushed the CPI rise of January to an 18.6 percent annual rate, and shock at this short-term (and undoubtedly transitory) rate helped to stimulate an unusual revision of the fiscal budget in March. The budget (from October 1980) now projects a surplus of $10 billion to be achieved by expenditure cuts and an immediate new oil tax.

A slowdown in labor productivity growth over the last several years, particularly in the U.S., has caused considerable anxiety. U.S. labor productivity in 1979 actually went into reverse. Although debate continues on this problem, it appears that more of the slowdown than is generally realized can be attributed to a slow-

down in the growth of capital intensity (capital per unit of labor), incident to a sharp rise in the growth rate of the labor force since 1973, and to the cyclical slack in the economy.

Japan's faster monetary expansion during 1978 spurned its economy to higher growth during 1979, this time by the unusual path of domestic real demand. Indeed, the higher GNP growth rate occurred despite an extraordinary shift from a large surplus to a deficit in Japan's current account (from $16.5 billion in 1978 to -$7.5 billion in 1979).[7] This extreme reaction suggests that at a time when the U.S. is likely to go into recession, and despite relatively optimistic forecasts, little support for the world economy will be forthcoming from this, the second largest national economy. (It is not commonly realized that Japan's GNP approaches half the U.S. level.)

In Germany and Italy too higher monetary growth rates during 1978 were followed by stronger real growth during 1979. The pattern of developments in Germany resembles that of Japan, with the exception of the currency depreciation. Higher oil prices pushed up consumer prices at a 7 percent rate by the third quarter from a very low 2.5 percent rate in 1978. The reactive slowdown in monetary growth was fully as drastic as Japan's (see Table VII-4). Italy and France alone pursued a policy of steady monetary growth during 1979 (which still represented some tightening, in view of the effect of prices upon real cash balances).

The combined (depressive) effect of prices and money on real monetary expansion for the four major European countries is suggested by the preliminary 1980 figure shown in Figure VII-2b.[8]

The U.K. was a rather special case. Both a tightening of monetary growth during 1978, intensified during 1979, and a wave of cost-push inflation in the form of wage concessions and a 7 percent rise in VAT, sharply reduced real cash balances (from mid-1978 to mid-1979). Thus, even before the brunt of the oil shock, the British economy began to suffer a clear recession (alone among the industrial nations). In Table VII-1 we note its -2.3 percent growth rate during the second half of 1979. Negative growth is also forecast for the U.K. in the coming year by the OECD. But for the industrial world as a whole, outside the U.S., most forecasts (especially those, like the OECD's, that were prepared before December 1979) appear too optimistic in view of the price-money squeeze which began during 1979 and which must inevitably persist during 1980.

[7] This unusual shift is only partly explained by the oil price rise and domestic expansion. It also appears to reflect an overshooting in the yen's earlier upward trend. The steep trade balance reversal was associated with an equally dramatic depreciation of the yen during 1979.

[8] This figure will be pushed still lower by the larger price level rise during 1980 likely to result from the passing through of the end-1979 oil price increases.

Table VII-5

CHANGES IN WORLD TRADE, 1967-79
(Percentages)

| | 1967-77 | 1978 | 1979 |
|---|---|---|---|
| All goods (volume) | 7.5 | 5 | 6 |
| Manufactures (volume) | 9 | 5 | 7.5 |
| OECD imports (volume) | | 5 | 7 |
| OECD exports (volume) | | 6 | 8 |
| OECD imports (price) | | 10 | 19 |
| OECD exports (price) | | 13.5 | 14 |
| Approximate percent change in OECD terms of trade | | 3 | -4 |

Source: *NIER*, February 1980.

Table VII-6

ISRAEL'S MARKETS[a]—IMPORT GROWTH ABROAD WEIGHTED BY SHARE OF ISRAEL'S COMMODITY EXPORTS, 1978-79

| | 1978 | | 1979 | |
|---|---|---|---|---|
| | Incl. diamonds | Excl. diamonds | Incl. diamonds | Excl. diamonds |
| 16 developed countries[b] | 6.0 | 6.3 | 6.9 | 6.7 |
| 23 countries[c] | 5.6 | 7.3 | 1.3 | 2.2 |
| 23 countries adjusted for Iranian boycott[d] | 5.6 | 7.3 | -0.4 | 1.3 |

[a] In this table the term "market" refers to only one of several possible concepts, namely import growth abroad weighted by each country's (1978) share of Israel's exports.
[b] In 1978 this group took 71 percent of Israel's exports including diamonds and 67 percent excluding diamonds.
[c] Includes the 16 developed countries. In 1978 this group accounted for 86 percent of exports including diamonds and 78 percent excluding diamonds. The steep 1979 fall was due to the 70 percent decline in Iranian imports from all sources.
[d] In this average change Iran is credited with a 100 percent decrease, reflecting its postrevolutionary suspension of trade with Israel. Note that part of the unclassified residual of exports (not included above) also went to Iran.

Table VII-8 sheds some light upon the effect of the oil price shock on inflation in the U.S. and the six other large economies collectively. As measured by the consumption deflator, this factor accounted for virtually all the acceleration of con-

Table VII-7

CHANGES IN CONSUMER PRICE INDEXES IN INDUSTRIAL COUNTRIES, 1977-79
(Percentages, annual rates)

| | | | | 1979 | | | |
|---|---|---|---|---|---|---|---|
| | 1977 | 1978 | 1979 | I | II | III | IV |
| U.S.A | 6.5 | 7.7 | 11.4 | 11.6 | 13.1 | 13.3 | 13.5 |
| Japan | 8.1 | 3.8 | 3.6 | -1.3 | 7.0 | 8.2 | 6.4 |
| Germany | 3.9 | 2.6 | 4.1 | 5.8 | 4.3 | 7.5 | 4.9 |
| France | 9.4 | 9.1 | 10.8 | 10.4 | 10.8 | 13.3 | 11.7 |
| U.K. | 15.9 | 8.3 | 13.4 | 12.8 | 10.4 | 34.6 | 12.9 |
| Italy | 17.0 | 12.1 | 14.8 | 15.9 | 14.5 | 19.0 | |
| Canada | 8.0 | 9.0 | 9.1 | 10.2 | 10.3 | 7.2 | 10.1 |
| Four European countries | 9.6 | 6.9 | 9.3 | 9.9 | 8.8 | 15.9 | — |
| Total OECD | 8.7 | 7.9 | 10.1 | | | | |

Source: 1977-78—OECD, op. cit., Table 23; 1979—*NIER*, op. cit., February 1980; 1979 quarterly figures—Federal Reserve Bank of St. Louis, op. cit.

sumer price inflation in the U.S. from the first to the second half of 1979, and for about half in the other six countries.[9]

Two other aspects of the U.S. experience in 1979 deserve brief attention. Although, the proposal for a "tax-based incomes policy" (TIP), described in last year's Annual Report, was not accepted by Congress, a quite elaborate system of "voluntary wage-price guidelines" was set up in late 1978. This system was backed up by sanctions in the form of government contracts and purchases, and achieved widespread compliance. There is some evidence[10] that it helped to achieve the somewhat surprising restraint of wages and nonoil prices during the year. Wage increases did not exceed the previous year's rate, and prices, outside of housing and energy, accelerated by only about 1 percent.

It is worth noting that this system of incomes policy, little known outside the U.S., does exist, and could, if the decision were taken, provide the apparatus for a more ambitious compulsory program as part of a drive for disinflation.

Finally, we note that, as Figure VII-2 shows, the fall in real GNP growth in the U.S. in 1979 was moderate in comparison with that in 1974, which followed a somewhat steeper fall in real *M*. A new tightness in business inventory policy has been given much credit for this, and may have had some effect. It is likely,

[9] More detailed data (not shown) indicates that VAT rises in Germany and the U.K. and the wage-push already noted in the latter country account for most of the other half.

[10] The Report of the President and his Council of Economic Advisers, January 1980, provides a summary of this and of the working of the guidelines.

Table VII-8

EFFECT OF ENERGY PRICES ON CONSUMER PRICE RISES, 1978-79

| | | | 1978 | 1979 | |
|---|---|---|---|---|---|
| | 1978 | 1979 | Second half | First half | Second half |
| U.S.A. | | | | | |
| Consumption deflator | 6.8 | 8.9 | 7¼ | 9½ | 10 |
| Consumption deflator excl. energy | | 7½ | 7½ | 8 | 7½ |
| Six other large countries | | | | | |
| Consumption deflator | 6.1 | 7.1 | 6 | 6 | 10 |
| Consumption deflator excl. energy | | 6¼ | 6¾ | 5½ | 8[a] |

[a] Mainly due to the increase in VAT in the U.K. and Germany (especially the U.K.).
Source: OECD, op. cit., Tables 22, 23.

however, that the stronger growth of money (measured by the still unfamiliar $M_{1b}$ concept) and of credit were mainly responsible. This is consistent with the smaller fall of real $M$. Unfortunately, a steeper decline in growth and, especially, a collapse of consumer demand, were probably "in the pipeline". (Such a collapse in the fourth quarter of 1974 induced the massive inventory liquidation in the first quarter of 1975.) The likelihood of this (already reflected in some indicators published by April) is increased by the fact that consumer demand in 1979 and the first quarter of 1980 was stretched thin. Despite a 2-4 percent fall in disposable income, a wave of borrowing (on inflated housing values in large part) and buying in advance of expected higher inflation, pushed saving rates to a historic low of 3 percent.

The rise in world oil prices by 120 percent (from an average of $13 to $28/barrel) from December 1978 to January 1980 took place in a way which would suggest, at first sight, that it greatly overshot the maintainable equilibrium level. The direct stimulus was given by the interruption of output in Iran during the revolution of late 1978. Despite offsetting increases elsewhere (even in OPEC countries), this set off a destablizing speculative wave of inventory demand in the spot market, which sent spot prices soaring by about 150 percent and kept them very high to the end of 1979 (peaking at about $40/barrel). Observing this boom of spot prices, OPEC members were unable to resist the temptation of, first, bringing forward to March raises intended for October and, finally, leapfrogging in December and January to the full 120 percent rise.

**Table VII-9**

**CHANGES IN OIL (OPEC) AND NONOIL COMMODITY PRICES, 1977-79**
(Percent changes in dollar prices)

| | 1977 | 1978 | 1979 |
|---|---|---|---|
| OPEC weighted average[a] | 7.6 | 2.4 | 46 |
| Food | 38 | -16 | 9 |
| Agriculture—raw materials | 7 | 10 | 23 |
| Metals and minerals | 5 | 6 | 27 |
| All (nonoil) commodities | 25 | -7 | 16 |
| All (nonoil) commodities in SDR prices | 23 | -14 | 12 |

[a] The 1977 and 1978 figures are the price change of "Arabian light" oil. The weighted average export prices rose as follows: 1978—$13; 1979I—$14; 1979II—$17; 1979III—$21; 1979IV—$24 (annual average = $19); Jan. 1980—$29.
Source: *NIER*, op. cit.

**Table VII-10**

**CHANGES IN WAGES, GNP PRICES, AND EXPORT PRICES IN INDUSTRIAL COUNTRIES, 1978-79**

| | 1978 | | | 1979 | | |
|---|---|---|---|---|---|---|
| | Hourly wage | GNP price | Export price (local currency) | Hourly wage | GNP price | Export price (local currency) |
| U.S.A | 8.6 | 7.3 | 7.0 | 8¾ | 9 | 9¾ |
| Japan | 5.9 | 4.8 | -4.0 | 7¾ | 3¼ | 9 |
| West Germany | 5.1 | 3.9 | 0 | 6 | 3¾ | 3 |
| France | 12.9 | 9.9 | 5.1 | 14¼ | 10¼ | 8¾ |
| U.K. | 14.6 | 10.3 | 7.3 | 15 | 14¼ | 10¼ |
| Italy | 16.2 | 13.3 | 7.0 | 18 | 15½ | 17¼ |
| Canada | 7.2 | 6.4 | 8.5 | 9½ | 8½ | 18 |
| Total, above | **8.7** | **7.1** | **3.5** | **-9½** | **8** | **9½** |
| Total OECD | **9.0** | **7.4** | **3.2** | **9½** | **8** | **9½** |

Source: OECD, op. cit., Tables 20, 24, 48.

Obviously the temporary stockpiling demand which could raise spot prices (the prices of at most 20 percent of total oil exports) by 150 percent, and hence the average price for all oil exports by about 30 percent, could not justify or support a 120 percent rise for all exports in a competitive market. The disappearance of

stockbuilding, and the fall in demand in 1980 due to the expected recession, would, in such a market, drive prices below their 1978 level.

But the oil market is not competitive. Its supply curve is not "given", but set where the cartel decides to set it. There are two main operative forces at work: first, the short-run elasticity of demand for oil exports is apparently still far below the monopoly profit maximizing level (near unity). Hence, if they are willing to absorb the reductions in sales, all OPEC members will gain from the higher prices—in the short run. But even if they judge that they have overshot the price which best serves their long-run interests (elasticity is much higher in the long run—and the sharp real rise will help to stimulate investment in both oil and in unconventional substitutes), the same elements of pride and inflationary expectations, which create negative wage and price rigidity in other "organized" markets, will probably prevent the cartel from lowering nominal prices. They would at best allow real prices to drop with dollar inflation.[11],[12]

That the cartel will still be able, "by the stroke of a pen," to transfer upward of another $140 billion from the world's consumers to its own pocket in 1980, is testimony to the exploitative power given it by a low short-run elasticity of demand, uncompensated by any serious system of international restraint of monopoly power, despite suggestions for such a system. The suggested remedies have included collective economic sanctions: for example, discriminatory taxation of major exports to OPEC members, or, more moderately, a higher tariff against imported oil. The latter would absorb part of potential monopoly profit and either force the real supply price downward or preclude its rise in the producers' own interest. Such a tax, recommended for several years by economists,[13] is finally represented, in the germ, by President Carter's imposition in March 1980 of a 10¢ per gallon "gasoline tax" (actually a tariff of $4.62/barrel, i.e. about 16.5 percent against oil imports destined for gasoline use).

### 3. TRADE AND CAPITAL MOVEMENTS—ISRAEL AND THE WORLD

Tables VII-5 and VII-9 summarize world trade and payments figures. The stronger recovery in Europe and Japan brought a moderate boom in world trade

[11] Note that gasoline demand, a large part of total oil demand (about half in the U.S.), has a short-run elasticity of about -0.3. Over a few years this rises to about -0.8. Gasoline prices in the OECD generally have been held far behind crude oil until 1979. In the U.S. the real price only rose 20 percent from 1972 to 1978. But policy has now shifted. The real U.S. price was allowed to rise by at least 20 percent in 1979 alone. A 10¢/gallon Federal tax has just been added, and domestic oil price decontrol is proceeding in 1980.

[12] The western boycott of Iranian oil, which began in April, will apparently offset part of the negative market pressure described, but Iranian exports had fallen to only 1 to 1.5 million barrels a day even before this development.

[13] See especially H. Houthakker, "The World Price of Oil—A Medium-Term Analysis", American Enterprise Int., Washington, D.C., 1976; and M. Adelman, "Constraints on the World Oil Monopoly Price", *Resources and Energy*, 1978.

Table VII-11

WORLD CURRENT ACCOUNT,[a] 1978-79
($ billion)

| | 1978 | 1979 | Change |
|---|---|---|---|
| U.S.A. | -13.9 | -2.5 | 11.4 |
| Japan | 16.5 | -7.5 | -24.0 |
| France | 3.9 | 1.5 | -2.4 |
| Germany | 8.8 | -1.0 | -9.8 |
| Italy | 6.4 | 6.3 | -0.1 |
| U.K. | 2.0 | -5.5 | -7.5 |
| OECD, total | 9 | -30 | -39 |
| OPEC | 7 | 65 | 58 |
| Nonoil developing countries | -36 | -47 | -11 |
| Other | -9.5 | -11 | -1.5 |
| World total[b] | **-29.5** | **-23** | **6.5** |

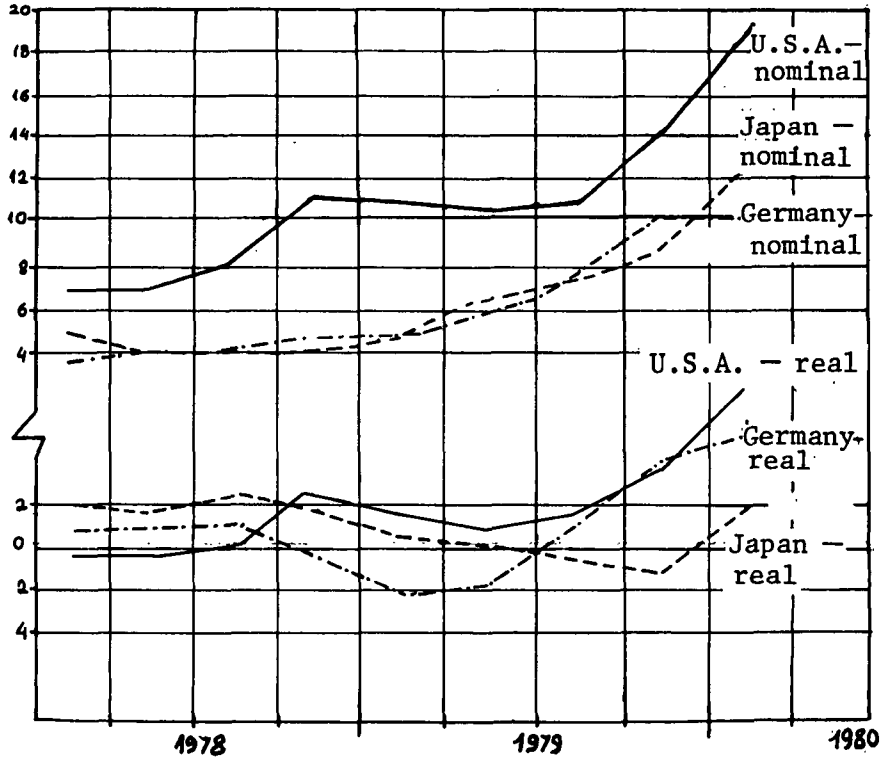
[a] Includes transfers and asymmetries.
[b] Reflects errors and asymmetries.
Source: OECD, op. cit., Table 30.

with it, despite the near collapse of trade with Iran.[14] The overall developments in international payments (the return of a vast OPEC surplus on current account and the complementary shift of other areas toward a deficit) have already been described. It goes without saying that the world financial system is again confronted with a heavy burden in rechanneling the OPEC surplus to deficit countries. In the four years following 1973 this meant largely channeling funds to the smaller OECD members and the developing countries, while the larger industrial countries in effect deflated their deficits away.[15] Despite the undue burden this placed on the less deflationary countries, and despite the fears expressed regarding their capacity to continue building up debt, the most important oil importers among the smaller industrial states and the developing countries have in fact increased their export earnings still more rapidly. But there have also been problem cases, particularly among the poorer developing countries. The deflationary policy reactions in the larger countries to the new oil shock threatens a repetition of this sequence, and thus, slower growth for the poorer countries.

[14] We consider market growth from the Israeli standpoint below.
[15] The ten largest OECD states (the "group of ten") reduced their total real domestic demand growth from 1973 to 1976 to only 3 percent, against a much more moderately deflated 9 percent for the rest of the OECD. After considerable delay, the laggardly recovery of the larger countries led most of the smaller industrial countries to slow their own growth, while most (but not all) developing countries avoided this by means of both more real devaluation and more debt. (The average growth rate of the developing group fell from 5.9 percent in 1967-72 to 5 percent in 1973-79.)

Figure VII-3

NOMINAL AND REAL SHORT-TERM INTEREST RATES, 1978-79
(Percent per year)




Source: IMF data—rates on 90-day commercial bills.

Figure VII-3 provides a simple expression of the upswing of interest rates during 1979.[16] Space precludes any detailed discussion of this subject, but we may see reflected even in this diagram the fact that the dominant forces behind this trend were (a) the rise of inflation itself, and (b) the pressure of anti-inflationary monetary policy, led by the U.S. This rise of U.S. short-term rates (first in the fall of 1978 and then strongly in the second half of 1979 and early 1980) tended to draw capital flows toward the U.S. One of the motives was, indeed, to strengthen the dollar in this way. As noted earlier, defensive reactions by other governments (both by the sale of dollars and by raising interest rates in other currencies) tended

[16] Based on IMF monthly estimates. Real rate levels shown are based upon the inflation trend, not current price changes alone.

to widely reduce monetary growth rates. The lag of Japan in raising interest rates (seen in Figure VII-3) helps to explain the steep fall in the yen during the second half of 1979.

Another interesting point reflected in Figure VII-3 is the fact that real interest rates (note especially the U.S. "real" curve) must rise significantly to exert a braking effect upon aggregate monetary growth and rising nominal demand.[17]

Although the available data on the matter is far from complete, it appears that the massive increase in the current deficit of the oil importing countries was primarily financed in 1979 by short-term capital flows (i.e. bank deposits) in the major countries, and by short-term flows and reserve losses in the smaller countries. Eurocurrency credit actually expanded at a lower rate than in 1978, but short-term credit took many other forms, including a huge rise in "accounts payable" for oil at higher prices.

The fact that the oil deficit was initially financed by short- rather than long-term capital flows was quite natural, and was a repetition of the experience following the 1973 oil shock. Increased OPEC surpluses initially tend to accumulate in bank deposits and are only gradually diversified (both directly and via the banks) to longer-term investments.

This shift from short- to long-term capital inflows (in financing the oil-related rise in the current deficit) occurs "from the supply side" for countries in which OPEC sources wish to invest directly. But for others, and particularly for Israel, it requires the maintenance of proper investment incentives, through full-employment GNP growth. In fact, the rise of Israel's private current deficit in 1979 was financed by an even larger rise in short-term private capital imports and some fall in the longer-term items (especially direct investment). On a year-to-year basis, this was partly due to a one-time portfolio adjustment (direct investment abroad by Israelis expanded slowly after the October 1977 liberalization). But in the main it reflected new market forces. Long-term private capital imports dropped (after their upswing in 1977 and 1978) apparently in response to both the slump of the security and real estate markets in Israel (themselves leading cyclical indicators).[18]

## 4. ISRAEL

### (a) Markets, Terms of Trade, and Exchange Rates

Tables VII-5 and VII-6 indicate the moderate surge in world trade, reflected still

[17] Note that the U.S. real rate rose first by 2 percent in late 1978 to initiate the two-quarter slowing of $M_1$ and a slowing of nominal demand as well. This was followed by a contrary real interest rate movement until about July (and $M_1$ growth recovered strongly), and finally by a sharp two-step upswing of nearly 8 percent which again slowed $M_1$ growth and apparently tipped the economy into a recession in the second quarter of 1980.

[18] The borrowing component of this aggregate may also have been negatively affected by the new restrictive measures, intended primarily to curb short-term inflows through the banking system.

more moderately—due to the greater weight of the slow growing U.K. in Israel's exports—in the growth of this country's main export markets. We see this in the growth rates of the group of "16 developed countries" in Table VII-6. However, this table also displays in unmistakable terms the one-time depressive impact of the closure of the Iranian market (of rapidly growing weight since 1974) to Israeli exports. In fact, the direct reduction of exports to Iran was greater still (including services and items not specified as to destination). This said, we must repeat the point of Chapter V on exports, that a fall in a weighted average of this type due to loss of one national market among many is far less significant than a similar fall due to a proportionate world-wide slowdown. In the former event considerable geographical substitution is possible to dampen the effect.

Nevertheless, taking into account this special factor and the continued recession in the world diamond market, Israel's export performance in 1979 (in terms of value added) was impressive, and testified to longer-term elasticity responses to earlier real devaluation (up to 1977), as well as the gradual lowering of trade barriers with the EEC. The latter development encourages greater output specialization, and hence higher ratios of exports and imports to GNP.

Tables VII-12 and VII-13 provide the basic facts regarding Israel's terms of trade and exchange rates during 1979. After having slowly returned, despite much higher real oil prices, to their 1973 level (itself a highly favorable trend), Israel's terms of trade again sank in reaction to the second oil price shock. The direct effect of oil prices was worse for Israel than for other oil importing nations, as a result of both the loss of part of the income from Sinai wells transferred to Egypt and exceptional dependence on the spot market (average 1979 oil prices rose 65-70 percent for Israel vs. 45 percent for the OECD). In 1979 a considerable part of the terms of trade effect of oil prices appears to have been offset by rising terms of trade in Israel's services account and, more moderately, in trade in manufactures. However, the oil price effect will continue in 1980. Table VII-13 shows that the overall terms of trade loss (netting out all changes in goods and services) already amounted to a cut in Israel's real national income (the purchasing power of an unchanged real GNP) of about 2.3 percent from 1978 to the third quarter of 1979. It bears repeating that this reduction (for the appropriate period) should be subtracted from the average rise in labor productivity in estimating the noninflationary rise in real wage rates which the economy can afford while maintaining full employment.

The improvement registered in the services terms of trade reversed a fall during 1978 and presumably reflected the adjustment to the real devaluation of October 1977 (effective for services) and the lack of any further sharp change in the real exchange rate during 1979.

Table VII-12

CHANGES IN THE EXCHANGE RATE OF THE IL—VARIOUS CONCEPTS
(Percentages)

| | IL/$ | IL/basket 5 currencies[a] | IL/15 currencies | |
|---|---|---|---|---|
| | | | Import weights[b] | Export weights[b] |
| 1979 | | | | |
| January | 1.3 | 2.3 | 2.1 | 2.1 |
| February | 2.2 | 2.2 | 2.1 | 2.0 |
| March | 4.3 | 4.4 | 3.8 | 3.8 |
| April | 8.7 | 8.3 | 7.4 | 7.3 |
| May | 7.1 | 6.2 | 6.3 | 6.3 |
| June | 4.5 | 5.7 | 5.6 | 5.4 |
| July | 4.0 | 7.3 | 6.7 | 6.6 |
| August | 3.6 | 3.2 | 3.8 | 3.0 |
| September | 6.2 | 2.1 | 7.3 | 7.5 |
| October | 5.9 | 5.8 | 5.3 | 5.1 |
| November | 6.4 | 10.6 | 6.3 | 6.5 |
| December | 7.2 | 9.3 | 9.4 | 9.2 |
| January—December | **81.5** | **92.0** | **88.9** | **87.7** |
| 1980 | | | | |
| January | 6.7 | 7.8 | 7.3 | 7.4 |

[a] The currency basket used during a period of crawling peg.
[b] Based on 1977 Israeli export and import weights for 15 major trading partners.
Source: Bank of Israel data. The monthly figures equal the average of the daily quotations.

The last point brings us to Table VII-12, showing monthly and yearly changes in the IL exchange rate. We observe that a slightly "low" devaluation in relation to the $ alone (81.5 percent, which was below relative Israel/U.S. inflation) was compensated by a continued moderate downtrend in the $ relative to other major currencies.[19] This implies that the IL exchange rate rose by more than relative inflation for these other currencies (e.g. the European ones). The average rise was in the range of 88 to 90 percent, roughly equal to Israel's overall relative inflation during the year (e.g. the CPI rise in Israel — 111 percent—together with an average rise in the OECD of about 11 percent, implies a relative Israeli inflation of 90 percent).

[19] This downtrend, unlike the steeper fall in the dollar during 1978, did not significantly differ from the excess of U.S. inflation over the average of the other major currencies, and therefore could not have shifted Israeli exports from the U.S. toward Europe. The sudden upswing of the dollar in early 1980, and the consequent slowing of IL devaluation relative to European currencies, would encourage an opposite shift. However, the relative rise in the $ is likely to be transitory, since it mainly reflects the peaking of U.S. interest rates before recession. The past recession again showed that a relative U.S. slowdown, although increasing the export surplus, tends to worsen the capital account so much as to actually weaken the $.

## Table VII-13

## EFFECT OF ISRAEL'S TERMS OF TRADE, 1978-79[a]
(1973=100)

| | Incl. diamonds | | Excl. diamonds | | 1979 | | | |
|---|---|---|---|---|---|---|---|---|
| | 1979 | 1978 | 1979 | 1978 | I | II | III | IV |
| 1. Import prices[b] | 216.5 | 178.3 | 204.9 | 165.7 | 197.7 | 205.1 | 227.9 | 235.2 |
| 2. Export prices[b] | 211.2 | 186.3 | 193.6 | 164.8 | 198.2 | 206.0 | 215.4 | 223.9 |
| 3. Terms of trade—goods (2/1) | 97.6 | 104.5 | 94.5 | 99.5 | 110.3 | 100.1 | 94.5 | 95.2 |
| 4. Percent change in (3) from 1973 | -2.4 | 4.5 | -5.5 | -0.5 | 0.3 | 0.1 | -5.5 | -4.8 |
| 5. Cumulative effect on national income from 1973 (%) | -0.7 | 1.4 | -1.7 | -0.2 | 0.1 | — | -1.7 | -1.4 |
| 6. Change in (5) from 1978 | -2.1 | — | -1.9 | — | -1.3 | -1.4 | -3.1 | -2.8 |
| 7. Terms of trade—goods and services | 96.9[c] | 99.1 | | | 95.6 | 99.0 | 94.5 | — |
| 8. Percent change in (7) from 1973 | -3.2 | -0.9 | | | -4.4 | -1.0 | -5.5 | |
| 9. Cumulative effect on national income from 1973 (%) | -1.6 | -0.4 | | | -2.2 | -0.5 | -2.7 | — |
| 10. Change in (9) from 1978 | -1.2 | | | | -1.8 | -0.1 | -2.3 | |

[a] This table measures the adjustment in GNP data required by changes in the terms of trade in order to obtain the change in real national income. This consists of the change in purchasing power over imports of export earnings (i.e. the change in the terms of trade times the weight of exports in GNP). In previous years the cumulative effect was measured as a pure terms of trade effect (i.e. as the constant 1973 weight of exports in GNP times the percent change in the terms of trade). In this table it is the effect given the rising weight of exports in GNP. Thus lines 5 and 9 measure terms of trade changes from 1973 times exports (goods or goods and sercices respectively) as a percent of 1978 GNP. Lines 6 and 10 show the real national income effect of 1979 changes in the terms of trade on the same basis.

[b] Paasche indexes

[c] Preliminary estimate.

Although this is not the only possible calculation of "real devaluation",[20] it does indicate that the nominal devaluation of the IL in 1979 (in contrast to 1977 and 1978) did not produce any significant real exchange rate change. This does not necessarily imply complete neutrality in official exchange rate policy, since in the absence of a 12 percent tax and some quantitative restrictions imposed on short-term capital imports in early 1979, as well as some reserve accumulation, the real exchange rate would probably have fallen somewhat. Market forces, including both private and public sector capital imports since the liberalization of October 1977, have leaned in this direction, and this pressure continued during 1979.[21]

(b) **Liberalization, Inflation, and Macroeconomic Policy**

This brings us directly to the destabilizing factors affecting the Israeli economy during this period. An important (and necessary) factor in the acceleration of Israel's inflation in 1978-79 was almost certainly the rise of domestic liquidity growth from October 1977 through most of 1978. Most of this increase in liquid assets took the unconventional form of a rapid increase in the newly available resident foreign currency accounts (Patam), while $M_1$ growth actually slowed. As a result, the monetary and inflationary significance was difficult to forecast and was, in the event, underestimated.[22] The resulting excessive liquidity growth combined with a cyclical upswing and with several important new cost-push shocks, which consisted of two primary elements: First, the sharp rise of the effective exchange rate for imports at the time of the (October 1977) liberalization pushed down real wages and helped to unleash (during a year of cyclical upswing) a wave of overcompensating wage demands and settlements in late 1978 and early 1979.[23] Secondly, although it is difficult to calculate the net effect of the oil price explosion, with nearly 100 percent IL devaluation it may have directly explained 5 or 6 percent of the 25 percent rise in Israel's year-to-year inflation rate from 1978 to 1979. Indirectly, it might have made a further contribution if unions and firms attempted to restore real wages and profits. Such efforts (in respect to the cost of imported energy) could only further increase the cost-push inflationary pressure, and

[20] See the various measures discussed in the chapter on exports. A rising subsidy via credit to exporters (not included in the exchange rate measure above) may have produced some real rise in export profitability and certainly precluded any fall.

[21] At least three factors were at work here: the trade effect of the real devaluation of October 1977 (and before), the stimulus to private capital imports given by both liberalization and economic recovery, and, especially in late 1979, increased capital imports by the public sector to finance its larger fiscal deficit. Containment of the potential effect of this inflow upon the real exchange rate implies reserve accumulation, and has been the major source of excessive monetary growth since November 1979.

[22] Most of the growth of Patam represented a portfolio switch natural upon introduction of a new asset. The problem of measuring such near-monies is presently a subject of research, internationally and in Israel. In fact, this question only becomes vitally significant when important changes occur in the array of available liquid assets.

[23] We already noted that average real wages before taxes rose by about 10 percent in 1979, although falling terms of trade should have kept them roughly constant.

thus the slowdown of real demand which began in late 1979 and early 1980.[24]

The policy problems of 1979 were complicated by the ongoing need to adjust Israeli macroeconomic policy to the new institutional conditions of (relative) exchange liberalization, flexible rates, and closer integration with world markets in both goods and capital. The implication of full acceptance of such integration would be that changes in monetary policy (e.g. a tightening) would throw a larger share of the burden in the short run on the current account of the balance of payments (i.e. tighter monetary policy would induce capital inflows, which would reduce the real exchange rate, restrain exports, and increase imports). This implication became very actual in late 1978 in response to the severe tightening of credit expansion—with a suggestion of destabilizing speculative capital flows as well.

Israeli policy makers, however, have traditionally stressed the stable development of exports and resisted cyclical fluctuations in export profitability. In line with this approach, restrictions (a 12 percent tax on borrowing from abroad and quantitative limits) were imposed in early 1979 to allow the continuation of monetary and credit restraint without a further fall in the real exchange rate. However, a rejection (partial or complete) of the real exchange rate route to monetary and price level stabilization logically requires acceptance of one of the alternative routes: either a reduction in the public sector deficit and borrowing requirement (i.e. a tighter fiscal policy), or a temporary increase in all real interest rates (including those to savers).[25]

[24] With less cost-push pressure from both oil prices and wages, a greater share of the accelerating nominal demand expansion of 1979 could (and would) have taken the form of real growth. By this writing (April 1980), the demand recession is clearly evident in labor exchange statistics, final quarter consumption, import, and other data.

[25] The latter approach would replace monetary by saving scheme or bond financing of the deficit. The smaller liquidity of this alternative is implied by the very need to raise real interest rates significantly to bring it about. (If these assets were perfect money substitutes no significant rise would be needed.) Higher interest rates reduce demand both through their effect upon investment and by reducing the value of assets held by the business public (i.e. by a negative wealth effect upon consumption).