appreciation of the exchange rate in the presence of capital inflows. To represent this process, let the rate of increase of home-good prices, $p$, be proportional to the excess of expenditures over income, as captured by the current account deficit $B$:

$$ (A2.1) \quad \dot{p} = \theta B. $$

Now the expected rate of inflation has an additional component coming from the dynamics of $p$:

$$ (A2.2) \quad \dot{\pi} = \mu \dot{e} + (1 - \mu) \theta \dot{F}. $$

Using this, we can calculate the impact effect of $\Delta g$ on the current account as follows:

$$ (A2.3) \quad \dot{F}(0) = -\{1/(1 - \alpha[\mu \lambda + (1 - \mu) \theta])\} \Delta g, $$

which is greater due to expectations of higher inflation. The dynamics of debt are in turn determined by:

$$ (A2.4) \quad dF/dF = \{1/(1 - \alpha[\mu \lambda + (1 - \mu) \theta])\}(q^* - \beta(\lambda - \theta)). $$

Once again, the stable region for $\lambda$ is smaller. In other words, incorporating the dynamics of the nontraded sector makes instability more likely and exchange rate management more problematic.

3  Crisis Without Adjustment, 1978–79

The debt crisis developing in mid-1977 threw Turkey into a period of forced adjustment. As foreign exchange sources dried up, external balance became for the first time in many years a genuinely binding constraint, requiring an adjustment in the relation between income and absorption in the economy. Until the reform package of January 1980, the policies employed by the authorities were unsuccessful in extricating the Turkish economy from the crisis. In view of the foreign exchange constraint, some belt-tightening had become inescapable. However, the governments in power during this period—and there were many—compounded the problems by their refusal to implement vigorous adjustment measures. The investment boom collapsed, economic growth came crashing down, inflation rose to unprecedented heights, and income distribution worsened disastrously. The only positive development was the beginning of a series of debt reschedulings with official
and private creditors, to be discussed in chapter 9, which eased the
debt-service burden considerably.

In the present chapter we provide an interpretation of the immediate
aftermath of the debt crisis. Our argument will be that a collapse in
investment and an inflationary spiral were the key mechanisms enabling the
required adjustment to the external constraint to be achieved. In the absence
of sufficient reductions in nominal expenditures and of real exchange rate
depreciations, absorption could be brought in line with the available
resources only by engineering inflation. Inflation, in turn, had severe
consequences on income distribution, as real wages and the agricultural
terms of trade eroded. Meanwhile, it created windfall gains for the
entrepreneurs who had borrowed prior to the crisis, by effectively validating
their expectations. The lack of serious adjustment measures had a high cost
in terms of both foregone output and distributional objectives. What follows
can be read as a cautionary tale regarding the consequences of ignoring
accounting identities.

### 3.1 Government Policies and Inflation

The immediate consequence of the debt crisis was a foreign exchange
shortage, as foreign inflows slowed to a trickle. That meant that the current
account deficits had to come down. As table 2.1 showed, the deficit of $1.6
billion in 1978 was less than half that of 1977 ($3.4 billion), and a further
cut to $1.2 billion took place in 1979.

How were these cuts achieved? Policy itself was of little help. The
IMF was called on to administer a series of stabilization programs, and two sets
of adjustment measures were announced, one in early 1978 and the other in
1979. These programs aimed at reducing the public sector deficits and
improving the foreign exchange outlook. They included devaluations,
increases in prices of SEEs, and credit ceilings. But both programs, as well
as the two corresponding IMF standby arrangements, proved unsuccessful.
Until January 1980, the various adjustment measures undertaken by the
authorities can be aptly described as having been too little, too late. The
reduction in government spending was only half-hearted, and exchange rate
policy, albeit more active, lagged behind rising inflation. The governments
in power were too conscious of political support to administer radical shock
treatment and too divided to implement any feasible alternative.

The first casualty of the shortage of foreign exchange was investment,
which dropped sharply as the availability of imported inputs and capital
goods became problematic. In fact, the primary vehicle for reducing
dependence on foreign inflows was this reduction in capital formation. As
table 3.1 shows, the aggregate investment ratio collapsed from 25.0 percent
of GNP in 1977 to 18.5 percent in 1978, and then to 18.3 percent in 1979.
The public sector investment ratio declined to levels not experienced since
Table 3.1  Investment-Savings Balance and Growth of Real Expenditures, 1978–80

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>1979</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>18.5</td>
<td>18.3</td>
<td>21.4</td>
</tr>
<tr>
<td>Private</td>
<td>9.1</td>
<td>8.8</td>
<td>9.9</td>
</tr>
<tr>
<td>Public</td>
<td>9.5</td>
<td>9.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Domestic savings</td>
<td>15.9</td>
<td>16.2</td>
<td>15.9</td>
</tr>
<tr>
<td>Private</td>
<td>10.6</td>
<td>13.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Public</td>
<td>5.3</td>
<td>2.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Foreign savings</td>
<td>2.6</td>
<td>2.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Sectoral savings-investment balances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>1.5</td>
<td>4.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Public</td>
<td>-4.2</td>
<td>-6.8</td>
<td>-6.2</td>
</tr>
<tr>
<td>Total</td>
<td>-2.7</td>
<td>-2.1</td>
<td>-5.5</td>
</tr>
<tr>
<td>Growth of real expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>0.0</td>
<td>-3.4</td>
<td>-1.3</td>
</tr>
<tr>
<td>Public</td>
<td>-2.9</td>
<td>4.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>-0.7</td>
<td>-1.6</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

Source: SPO.

Note: Investment-savings balance data reported as a percentage of GNP. Growth of real expenditures excludes expenditures on inventories and is reported in percentages.

1974. But public savings also declined as a result of the adverse consequences of inflation on the tax revenues of the government. As a result, the public sector savings-investment balance improved in 1978 by only 2.5 percentage points, only to deteriorate in 1979 to a level below that of 1977. The public sector borrowing requirement remained at 7.9 and 8.9 percent (of GNP) in 1978 and 1979, respectively. This was lower than the record 10.6 percent of 1977, but was worse than the performance during 1974–76 (see table 2.6). The bulk of the burden fell on the private sector, in which the savings-investment balance turned positive for the first time since 1975 and rose to 4.7 percent of GNP in 1979.

The lack of serious adjustment on the part of the public sector is also visible from the figures on growth of real expenditures. The investment collapse of 1978 was associated with a real contraction of public expenditures in 1978, but such expenditures resumed their growth in 1979 and thereafter, albeit at much reduced levels compared to the mid-1970s (see tables 2.6 and 3.1). By contrast, the real expenditures of the private sector stagnated in 1978 and then fell for a number of consecutive years. By 1979 the public sector had regained its 1977 level of expenditures; the private sector would have to wait until 1984 for the same to happen.

The various governments' lack of resolve in expenditure reduction was equally evident in their expenditure-switching policies. A series of nominal devaluations of increasing magnitude was undertaken, but these proved ineffective in arresting the deterioration in competitiveness. As figure 2.1 showed, after a small depreciation in 1978, the real exchange rate appreciated
sharply in 1979 as nominal adjustments failed to keep pace with inflation. The authorities also experimented with other schemes. An attempt was made to increase workers’ remittances by giving them more favorable exchange rates. The effective subsidy rate on exports was increased by expanding tax rebates and allowing some retention of foreign exchange by exporters. While export receipts and remittances rose in response to these incentives, much of the adjustment burden still fell on imports.

In the end, foreign exchange was rationed not by price, but administratively. The authorities progressively reduced travel allowances for Turkish tourists going abroad, and allocated the scarce supplies according to the perceived needs of various importers. The black-market premium on the dollar rose as high as 91.4 percent at the end of the first quarter of 1979. Widespread shortages of imported commodities developed.

The consequence of all this was a rise in the rate of inflation. In the presence of an effective ceiling on external borrowing opportunities and a lack of sufficient restraint on nominal expenditures, real absorption could be brought in line with the available resources only by creating inflation. In this sense, it was inflation which equilibrated the open-economy national income identity, by closing the gap between ex ante demand and supply. Normally, inflation would have had adverse consequences on the external balance by, among other things, appreciating the real exchange rate. While, as pointed out above, the appreciation did take place, its effects on the current account were insulated by direct controls on the allocation of foreign exchange and by rationing. In the meantime, rising prices undercut the real purchasing power of large segments of the population with “sticky” nominal incomes (on which more later). Inflation here was not the problem but the “solution.”

Another way of observing this is through the perspective of the flow of funds. A given credit expansion in the economy gives rise to a larger expansion of monetary aggregates, and hence greater inflation, when leakage through the balance of payments is excluded. The figures from the balance sheet of the monetary authorities (table 3.2) show clearly that that is indeed what happened. In the 1974–77 period, the accumulating external liabilities of the central bank (including CTLDs) discussed above amounted to a staggering 116.2 percent decline in net foreign assets (in annual terms). With the central bank cut off from foreign funds after 1977, no such decline took

<table>
<thead>
<tr>
<th>Table 3.2</th>
<th>Annual Average Growth Rates (in percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>End-1974 to End-1977</td>
</tr>
<tr>
<td>Net foreign assets</td>
<td>-116.2</td>
</tr>
<tr>
<td>Domestic assets</td>
<td>60.6</td>
</tr>
<tr>
<td>Base money</td>
<td>35.7</td>
</tr>
</tbody>
</table>
place in 1977–79. The consequence was that a smaller rate of increase in
domestic credit in 1977–79, principally to the public sector, had a larger
eventual effect on base money. This also provides an answer to the puzzle
arising from the existence of an inflationary tide in a period in which the
PSBR and public recourse to the central bank were modest compared to the
heights reached in 1977.

Inflation, then, was part and parcel of the adjustment process which
achieved the drastic reductions in the current account deficits of 1978 and
1979. This process of adjustment via inflation is reminiscent of Albert
Hirschman’s analysis of the politics of inflation in the Latin American
context: “Where the state defers readily to all the successive demands made
on it by one group or one government department after another, inflation has
the function of denying part of what the state, in its weakness, has granted.
. . . [T]he state might be said to hand over to inflation the disagreeable job
of saying no” (1985, 73). In the same vein, the Turkish governments of
1978–79 handed over to inflation the disagreeable job of cutting real
expenditures.

The close association between the current account and inflation can be
seen from the evidence on prices portrayed in figure 3.1. Hence, it is clear
that inflation started to take off in the second half of 1977, just as new
borrowing opportunities were becoming extinct as a result of the developing
crisis. This was the period when foreign exchange shortages first made
themselves felt, with a consequent scarcity of imported inputs. The rate of
increase in wholesale prices reached 52.6 percent in 1978, 63.9 percent in
1979, and culminated in 107.2 percent in 1980 before it was brought under
control (see table 2.1). The peak of inflation in 1980 came at the same time
as the relaxation of the external constraint, which could be viewed as
contradicting the thesis here. But the high rate of inflation in 1980 was
largely a validation of price increases which had already effectively taken
place in black markets, and which became reflected in official statistics once
price controls were lifted in January 1980.

3.2 The Distributional Implications of Adjustment via Inflation

Figure 3.1 shows the relatively large divergence in price trends for
industrial and raw materials on the one hand, and food items on the other.
The first category was affected by the foreign exchange shortage to a greater
extent since its import content is much higher. As very little food is
imported, food prices were determined by domestic agricultural conditions
plus domestic support payments by the government. These support payments
were in turn eroded by inflation, with the consequence that the industrial and
raw materials index rose more rapidly than the food index.

As these trends suggest, the unwitting changes in the structure of relative
prices caused by inflation had serious consequences for income distribution.
Fig. 3.1 Wholesale prices (increase over previous year, 1963 = 100)

Source: OECD Economic Surveys, Turkey, April 1980.
In an economy like Turkey’s, there are two key relative prices determining the relative share of various groups in national income. The first of these is the agricultural sector’s terms of trade with the rest of the economy, which is a rough but good indicator of the rural-urban split. The second is the real wage, which is an indicator of distribution within urban areas between workers and others. With neither of these indicators was the Turkish experience after 1977 a happy one. Figure 3.2 displays the trends in both of these relative prices, together with the trends in aggregate real income and expenditure for purposes of comparison.

The evidence on the agricultural terms of trade shows the consequence of the price trends discussed briefly above. After a cumulative improvement of 24 percent between 1970 and 1977, the terms of trade declined sharply thereafter. Within the time span of two years (1978–79), a reduction of 23 percent brought the level to below where it had been in 1970. There was a further fall of around 4 percent in 1980, the effects of inflation being partially offset in that year by a large real depreciation of the currency.6

The fall in real wages was even more drastic. While the nominal wage data used in constructing the real wage series are problematic in that they do not include bonuses and fringe benefits, the evidence portrayed in figure 3.2 is sufficiently telling. Once again, the collapse comes right after 1977 and is the consequence of nominal wage contracts which did not fully anticipate the coming inflation. Between 1972 and 1977 real wages had increased by 32 percent. After 1977 real wages fell almost in the same proportion as the rising inflation: by 12 percent in 1978, 14 percent in 1979, and a stupefying
25 percent in 1980, bringing the cumulative reduction in three years to 43 percent.

The worsening of income distribution in this period was the consequence of inflationary pressures being reflected in contract prices (such as wages) only with a lag whereas other prices could adjust freely. Ironically, the resulting relative-price structure would be maintained and consolidated in the post-1980 period of adjustment. As will be discussed at greater length in the following two chapters, the inflationary episode of 1977–80 had disturbing effects which outlasted this period.

3.3 Concluding Remarks

Was there an alternative? Given the necessary retrenchment on the current account, it was inevitable after 1977 that real expenditures would have had to be cut somewhat. Instead, the authorities acted as if the crisis might go away if ignored, setting off an inflationary spiral which eroded the real incomes of the poorest segments of Turkish society. A series of bold measures of expenditure reduction and expenditure switching early on in the game might have enabled the economy to avoid some of the worst excesses of adjustment via inflation. In the event, letting inflation do the job of cutting real expenditures proved a very costly method compared to the obvious alternative of reducing nominal spending itself. In any case, the policies of the 1978–79 period did not seriously tackle any of the underlying problems of the economy, and they were incapable of promoting recovery. The latter would have to wait for the 1980s.

4 Stabilization and Adjustment Policies, 1980–85

As described in the earlier chapters, Turkey became the first major developing country debtor to face a deep payments crisis in the post-1973 period. Because of the poorly managed macroeconomic environment and massive short-term borrowing, Turkey’s debt rout arrived early in mid-1977 before the second oil shock of the late 1970s. A heavy reliance on import compression in combination with unrestrained nominal expenditures resulted in an inflationary slowdown of growth during 1978–79. The accompanying shortages in commodity supplies produced wide public discontent. The unsuccessful implementation of the IMF standby arrangements also strained