Volume Title: Developing Country Debt and Economic Performance, Volume 3: Country Studies - Indonesia, Korea, Philippines, Turkey

Volume Author/Editor: Jeffrey D. Sachs and Susan M. Collins, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-30455-8

Volume URL: http://www.nber.org/books/sach89-2

Conference Date: September 21-23, 1987

Publication Date: 1989

Chapter Title: Performance and Adjustment Patterns in the 1980s

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Chapter URL: http://www.nber.org/chapters/c9061

Chapter pages in book: (p. 679 - 700)

radical reforms and the ability to withstand the distributional consequences. It is to be hoped that this missing element has not deeply hampered the foundations of a long-term social commitment to a more viable development strategy.

5 Performance and Adjustment Patterns in the 1980s

After the review of the policy measures in chapter 4, in the present chapter we aim to analyze the performance and adjustment patterns of the Turkish economy in the post-1980 period. Following a brief look at the actual outcome in section 5.1, in the remainder of the chapter we seek to explicate the major macrolevel mechanisms and linkages in Turkey's recent adjustment experience. While leaving the quantitative treatment of selected topics to subsequent chapters, we focus here on the anatomy of the overall adjustment process, including the distributional aspects.

The main argument in the present analysis is that changes in macroeconomic prices have played a determining role in Turkey's overall adjustment effort. In this context, we consider the following as macroeconomic prices: the exchange rate, interest rates, SEE prices, real (urban) wages, and net prices (or domestic terms of trade) for major sectors. In the Turkish setting, real wages and sectoral net prices were determined by and large as residual variables, while the exchange rate, interest rate, and SEE prices served more directly as policy instruments.

On the subject of relative prices and distortions, the economic literature has been mainly concerned with microlevel efficiency and welfare issues. As aptly analyzed by Balassa (1987) recently, and Krueger (1974b) and Bhagwati (1971) earlier, policy-induced market distortions tend to have adverse effects on resource allocation and employment. The permanent removal of these distortions would involve transitional costs, but could bring a continuous stream of future benefits, as emphasized by Fischer (1986). The post-1980 Turkish policies did make a genuine effort to remove a wide range of distortions that prevailed in the pre-1980 period, but market imperfections and related inefficiencies continue to exist, as discussed in the context of SEE prices in section 4.6. The investigation of remaining microeconomic distortions and their allocational effects is an important item in the agenda of future empirical research on Turkey.[1] But our emphasis in the present chapter is on the *macro*economic consequences of a sharply altered relative-price structure, as took place in the Turkish economy.

From the analytical standpoint, an integrated treatment of the various price and nonprice components of the overall adjustment process is a highly complex undertaking. It is preferably conducted within a multiperiod computable general equilibrium (CGE) framework, incorporating a macromonetary module that captures the inflationary phenomena. The CGE model described in the next chapter lacks explicit mechanisms for SEE pricing, inflation, and monetary details. Hence, we have opted in this chapter for an analytic review which is perforce more ad hoc, but has the advantage that it does not miss out on important aspects. We make extensive use of the nominal- and constant-price series on income, expenditure, and savings, which have not been closely examined in earlier studies on the Turkish economy.[2]

5.1 Macroeconomic Performance and External Debt

Table 5.1 presents an overview of the macroeconomic performance from 1980 to 1985, including partially available data for 1986.[3] The GDP growth figures for the industrial and Middle Eastern economies, shown as memo items in the table, bring out the inhospitable nature of the external environment, especially from 1980 to 1983. Besides the economic slowdown of its trade partners, Turkey, as an oil-importing country, was also faced with the second oil shock, which involved more than a doubling of imported oil prices in the wake of 1980. The latter shock, in combination with devaluation, resulted in a 23 percent fall in the terms of foreign trade in 1980. Because of continued exchange rate depreciations, the foreign terms of trade showed further declines in 1981–83.

The policy initiatives in 1980 rapidly produced credible results at the macrolevel by lowering inflation and restoring growth in 1981–82. The resumption of growth reflected in large part export expansion, as can be observed from the changes in trade ratios. The year 1983 saw some setbacks in policy and performance with postponed adjustment in SEE prices. The liberalization process and price corrections gained renewed strength in 1984, as discussed in chapter 4. But inflation began to accelerate. In 1986 the sizable fall in the price of imported oil was not adequately exploited in the pursuit of price stabilization, thanks to the uncurbed rise in public expenditures.

The figures for current account balances and their financing patterns are assembled in table 5.2 for the 1980–86 period. To bring out the contribution of the debt relief (granted by the OECD governments), current balances are given for before and after debt relief.[4] In a complementary way, table 5.3 lists the main indicators of external debt for the 1981–86 period.

In a cumulative way, debt relief accounted for nearly 44 percent of total financing for current deficits in 1980–85. Furthermore, Turkey benefited from large-scale emergency financial assistance from its major creditors. In

Table 5.1 Macroeconomic Performance, 1980–86

	1980	1981	1982	1983	1984	1985	1986[a]
A. % Annual increase							
1. Real value added							
GNP	−1.1	4.1	4.5	3.3	5.9	5.1	7.8
Agriculture	1.7	0.1	6.4	−0.1	3.5	2.4	7.1
Manufacturing	−6.4	9.5	5.4	8.7	10.2	5.5	10.2
2. Employment	−0.1	0.9	0.9	0.7	1.3	1.1	2.1
3. GNP deflator	103.9	41.9	27.4	28.0	49.8	43.6	32.8
4. Fixed investment							
Private	−17.3	−8.7	5.5	4.8	8.8	7.8	13.5
Public	−3.7	9.4	2.2	1.7	1.8	13.3	10.2
5. Consumption expenditure							
Private	−4.9	0.6	4.2	4.7	5.5	3.6	7.8
Public	8.4	0.9	2.0	1.3	3.0	3.2	7.4
B. Trade ratios (% of GNP, current prices)							
1. Exports of goods (f.o.b.)[b]	5.0	8.0	11.0	11.6	14.7	15.6	12.9
2. Exports of goods and services	6.3	10.2	14.8	15.6	19.4	21.5	18.4
3. Imports of goods (c.i.f.)	13.6	15.2	16.5	18.1	21.4	21.9	19.1
Oil	6.6	6.6	7.0	7.2	7.3	6.8	3.9
Nonoil	7.0	8.6	9.5	10.9	14.1	15.1	15.2
4. Current account balance (after debt relief)	−5.5	−3.5	−2.2	−4.1	−2.8	−1.9	−2.2
Memo items:							
Real GDP growth (%)							
Industrial countries	2.0	1.6	0.5	2.6	4.4	2.9	3.1
LDCs	3.5	2.2	1.6	1.3	4.1	3.2	3.0
Middle East	−2.1	−1.8	−0.2	0.1	0.7	−1.6	0.2
15 heavily indebted	4.8	0.7	−0.4	−3.5	2.2	3.1	1.5
Exporters of manufacturers	4.6	4.7	5.0	7.2	8.3	6.6	6.1

Source: SPO and the central bank of Turkey for Turkish data; IMF *World Economic Outlook* 1986, pp. 183–84, for memo items.

[a]Provisional estimates (March 1987).

[b]Includes transit trade.

1980, the first year of the program, the latter aid resulted in a net resource transfer from abroad (excluding relatively minor items connected with FDI) amounting to a positive 4.7 percent of GNP. The net resource transfer/GNP ratio was also quite significant in 1981, materializing around a positive 1 percent. In the post-1982 period ushered in by the Mexican financial crisis, no major LDC debtor benefited from such a positive and sizable resource transfer in launching its adjustment program. We will return to this aspect of the Turkish experience in chapter 9 when we look at external financial relations more closely.

The data summarized in tables 5.2 and 5.3 also point to the reversal in debt-service trends starting in 1982. The noninterest current balances turned positive (implying negative resource transfers for the first time), and debt service as a percentage of GNP began to increase rapidly (especially after

Table 5.2 **Financing the Current Account, 1980–86[a] (million $)**

	1980	1981	1982	1983	1984	1985	1986 (provisional)	1980–85 (billion $)	
Part A: After debt relief									
Interest payments	−668	−1,184	−1,465	−1,441	−1,586	−1,753	−2,134	−8.1	
Noninterest current account	−2,270	−485	630	−387	179	740	606	−1.6	
Current account balance[b]	−2,938	−1,669	−835	−1,828	−1,407	−1,013	−1,528	−9.7	
Part B: Before debt relief									
Current account balance	−3,408	−1,919	−935	−1,898	−1,407	−1,013	−1,528	−10.6	(−100.0%)
Nondebt financing	−475	−100	−229	−62	150	298	−169	−0.4	(−4.0%)
Foreign direct investment	18	95	55	46	113	95	125	0.4	(4.0%)
Changes in reserves	−512	−263	−297	−269	208	−20	−545	−1.2	(−10.9%)
Counterpart to valuation changes	19	68	13	161	−171	223	251	0.3	(3.0%)
Net foreign borrowing	3,883	2,019	1,164	1,960	1,257	715	1,697	11.0	(104.0%)
Long term (LT)	2,194	1,165	1,030	303	1,046	−20	525	5.7	(54.1%)
Debt relief[c]	1,450	850	750	1,000	580			4.6	(43.8%)
Other LT (net)	744	315	280	−697	466	−20	525	1.1	(10.3%)
IMF (net use)	422	268	129	117	−142	−103	−241	0.7	(6.5%)
Implied short term	1,267	586	5	1,540	353	838	1,413	4.6	(43.4%)
Memo items:									
Debt repayment (LT, after relief)	−586	−620	−952	−1,066	−1,104	−1,858	−2,145	−6.2	
Debt service (after relief)	−1,254	−1,804	−2,417	−2,507	−2,690	−3,611	−4,279	−14.3	
Net resource transfer	2,745	577	−401	139	−329	−1,038	−437	1.7	

Source: Central bank of Turkey, IMF, and OECD (1986). The Present data partly reflect the latest available estimates provided in the 1986 Annual Report of the central bank.

Note: Numbers in parentheses are the percentage distribution of current account financing.

[a]Based on the revised presentation of the balance of payments.

[b]Corresponds to foreign savings in the post-1983 national accounts.

[c]Interest plus principal.

Table 5.3 External Debt Indicators, 1981–86

	1981	1982	1983	1984	1985	1986[g]
A. Billion $						
1. Debt,[a] of which	16.9	17.6	18.4	21.3	25.3	31.2
Short term (1)[b]	2.2	2.2	3.0	4.5	6.6	9.4
Short term (2)[c]	2.2	1.8	2.3	3.2	4.8	6.9
2. Net international reserves						
Excluding gold	1.5	1.8	1.9	2.7	2.2	3.1
Including gold[d]				3.5	3.3	4.3
3. Net indebtedness (incl. gold)				17.8	22.0	26.9
B. % of GNP						
1. Debt	28.6	32.8	36.1	42.4	47.8	53.1
2. Interest payments	2.0	2.7	2.8	3.2	3.3	3.6
3. Debt service[e]	6.8	7.9	9.4	11.8	15.9	19.0
4. Net resource transfer[f]	1.0	−0.7	0.3	−0.7	−2.0	−0.7
C. % of Exports of goods and services						
1. Debt	280.2	222.2	231.4	218.2	223.3	278.8
2. Debt service[e]	66.6	53.5	60.3	60.7	74.3	99.8
D. % of Imports of goods (c.i.f.)						
International reserves (excl. gold)	16.8	20.6	20.9	24.9	19.3	27.8

Source: All figures are based on and/or derived from the central bank's Annual Reports (1983–86) and measured in current prices and official exchange rates.

[a]External debt outstanding and disbursed.

[b]Includes all Dresdner scheme deposits.

[c]Excludes Dresdner scheme deposits with one-year or longer maturity.

[d]Gold is revalued at 216.7, 277.0, and 332.0 dollars per ounce at the end of 1984, 1985, and 1986, respectively.

[e]Debt service refers to the sum of interest payments, amortization on medium- and long-term debt, and all short-term debt of less than one-year maturity.

[f]A minus sign indicates net resource transfer (outflow) abroad.

[g]Provisional estimates.

1984), generating additional strains on public finance, as will be discussed more extensively in chapter 8. Notice, however, that the rise in the external debt stock from 1984 to 1986 reflects not only the impact of new borrowing, but also the valuation effects of dollar depreciation in this subperiod. Only around half of Turkey's external debt is denominated in U.S. dollars (see table A.18 in the stat. app.).

Perhaps the most distinguishing feature of the post-1980 experience is the rapid rise in export/GNP ratios, as shown in table 5.1. Although a fraction of this export expansion is attributable to overinvoicing, as will be explored in some detail in chapter 7, the export success has been a remarkable achievement, given the limited familiarity with export markets in the pre-reform period. Turkish foreign policy has been a supportive factor in broadening export penetration in the Middle Eastern region, particularly in Iran and Iraq, on the basis of special trade arrangements involving oil import schemes (see Akder 1987). The setback in the 1986 export performance reflected, in part, the drop in the oil revenues of the Middle Eastern trading

partners. This prompted the authorities to introduce additional export incentives in early 1987 (including differential premia on specific product categories) to redirect exports to the OECD economies.

A disappointing aspect of the post-1980 recovery effort was the decline in private fixed investment in the initial two years of the program. The cumulative fall of about 40 percent in real terms in investment expenditures from 1977 to 1982 was finally halted in 1983, but a buoyant investment climate in export-oriented sectors had not yet arrived by the mid-1980s. As a consequence, the share of the private sector in total fixed investment declined to 41 percent in 1978–84 from 52 percent in 1973–77. Rapidly growing public investments have been concentrated in the energy and services sectors. There seems to have been a general expectation on the part of the authorities that the increase in the production of exportables would be generated by private sector projects. However, the share of agriculture, mining, manufacturing, and tourism—the main sectors for exportables—in total private investment decreased to 41 percent in 1978–84 from 51 percent in 1973–77. These investment trends point to the lag in the restructuring of the economy in a way that would sustain an export-led expansion in the medium-term future.

5.2 Movements in Macroeconomic Prices

Since the burden of macroeconomic adjustment fell on key relative prices in the Turkish economy, we start by examining the changes in the structure of macroeconomic prices in the post-1978 period. We will look subsequently at the resulting income and expenditure patterns. Table 5.4 shows the trends in key prices in two groups, separating those that exhibited increases (in real terms) from those with decreases. In this table, the net prices of some major sectors (such as construction, transportation, etc.) are not reported to avoid undue clutter in the presentation. We take 1978 as a base because from then on, the Turkish economy began to adjust to the debt-precipitated crisis of mid-1977. Once again, an upward movement in the exchange rate (TL/foreign currency) indicates depreciation.

The pattern in 1979 is different from that after 1980 in one important way. In the absence of adequate policy measures, as we described in chapter 3, the inflationary process resulted in real exchange rate appreciation and a lower real interest rate (on time deposits). But it also eroded the real consumption wage and agricultural net price quite substantially, a process that would not be reversed later on. The net prices of manufacturing and trade (i.e., wholesale and retail commerce) moved up this year.

The policy shock in 1980 achieved a large depreciation of the real exchange rate and additional increases in the net prices of energy, manufacturing, and trade sectors. In turn, it resulted in a further fall in the real consumption wage, while eroding government employee salaries. The net (after tax) interest rate remained negative in 1980.

With the establishment of transitional military rule at the end of 1980, these relative prices, and especially those that affected distribution directly, were largely consolidated. The implicit incomes policy treated the 1981 structure of relative prices more or less as a guideline in the determination of urban wages and agricultural support prices. Thus, the real income losses incurred by urban wage earners and agricultural producers during 1978–80 became an economically permanent and politically unchallenged component of the 1981–85 policies. It is obvious that this particular aspect of the post-1980 program may not be a transferable item in the design of adjustment plans elsewhere.

In those manufacturing branches that had a narrow export orientation and limited access to concessional export credits, the fall in wage shares could not fully offset the rise in interest payments, causing a decline in net profit shares in 1981 and 1982.[5] The resulting illiquidity, and in some cases insolvency, problems were partly eased by the provision of full tax deductibility of interest payments, which lowered the corporate tax burden.

In the case of the agricultural sector, the fall in net prices reflected the effects of: (a) restrained support prices, (b) reduced subsidies on inputs, the prices of which increased in real terms, (c) limited incentive benefits from export promotion which heavily relied on manufactures, (d) unfavorable world agricultural prices, and (e) domestic demand shifts originating from the substantially reduced purchasing power of urban workers. The sharp rise in nonagricultural prices and export incentives resulted in an increase in the profit margins in wholesale and retail trade, which is reflected in the trade sector net prices in table 5.4.

Energy and mining prices soared after 1980 mainly to improve the SEE profit position. The real exchange rate was depreciated in response to additional trade liberalization, as well as to keep the export momentum going. In line with the partial liberalization of external financial flows, real deposit rates were also increased in 1985 (after a fall in 1984). After 1983 the government introduced tax rebates on wage and salary earners' consumption expenditures. This mechanism served as an instrument to decrease (through a restrained stance on gross wage adjustments) real product wages at a faster rate than real consumption wages, as the relevant figures show in table 5.4.

Finally, this review of the post-1978 price structure can be made more striking by comparing it with the pattern of pre-1978 prices. Figures 5.1 and 5.2 illustrate the behavior of selected macroeconomic prices for the entire 1973–85 period. Figure 5.1 shows the large blows delivered to the Turkish economy by two rounds of oil price increases in 1973–74 and 1979–80, which caused the foreign terms of trade to fall steeply. The pattern depicted in this figure is of interest in that it reveals clearly the sharply divergent attitude of policymakers toward urban workers before and after the 1977 crisis. Prior to 1977, the real consumption wage was on a sharp upward trend even though the Turkish economy was hit by substantial terms-of-trade

Table 5.4 **Relative Price Movements, 1978–85 (1978 = 100)[a]**

	1978	1979	1980	1981	1982	1983	1984	1985
A. Increases								
Real exchange rate[b]	100	89	116	119	136	142	148	149
Real interest rate on 1-yr deposits (%)	−25	−31	−38	0	8	5	4	8
Real sectoral net prices[c]								
Energy + mining	100	95	126	145	160	161	178	230
Manufacturing	100	111	120	118	120	123	120	116
Wholesale & retail trade	100	109	119	120	121	122	122	122
B. Decreases								
Terms of foreign trade ($)	100	100	77	71	67	66	75	76
Real product wage[d]	100	90	76	77	76	69	66	53
Real consumption wage[e]	100	86	66	72	61	65	63	60
Real sectoral net prices[c]								
Agriculture	100	88	84	85	79	77	79	76
Government services[f]	100	99	74	64	67	63	48	46
Memo item:								
Financial sector net price[c]	100	80	76	95	88	88	128	136

Source: Central bank of Turkey for real interest rates (averages of quarterly highest returns); State Institute of Statistics for sectoral prices and terms of foreign trade; and SPO for nominal wage data (*Türkiye Geneli İşçi Ücreti*) deflated as noted below.

[a]For all prices: 1978 = 100, except for the real interest rate (annual).

[b]Real effective exchange rate (TL/foreign currency; export weighted).

[c]Ratio of sectoral value added (factor cost) deflator to GDP deflator.

[d]Gross wages (labor cost) deflated by the GNP deflator.

[e]Net wages (after tax and tax rebates) deflated by the implicit deflator for private consumption in the national accounts.

[f]Government services value added comprises gross employee salaries.

shocks. After this date, real consumption wages appear to have borne the full brunt of the deterioration in the external terms of trade.

Figure 5.2 shows further details of the contrasting policies. During the mid-1970s, the agricultural terms of trade improved and the manufacturing net price declined, while the exchange rate appreciated, lowering the real costs of imported inputs. These trends were reversed in a sharp manner after 1978–80. As the picture shows, the transformation in the structure of relative prices has been quite a radical one in comparison to previous experience.

5.3 Relative Price Changes

In this section, the various balances of Turkey's macroeconomy are presented both in current prices and in constant 1983 prices. The purpose is to bring out the impact of relative price changes on basic macroeconomic relations and patterns in pre- and post-1980 periods.

At the outset, a word of caution is in order as regards the use of the 1983 base as a benchmark for the post-reform price system. It may be plausibly

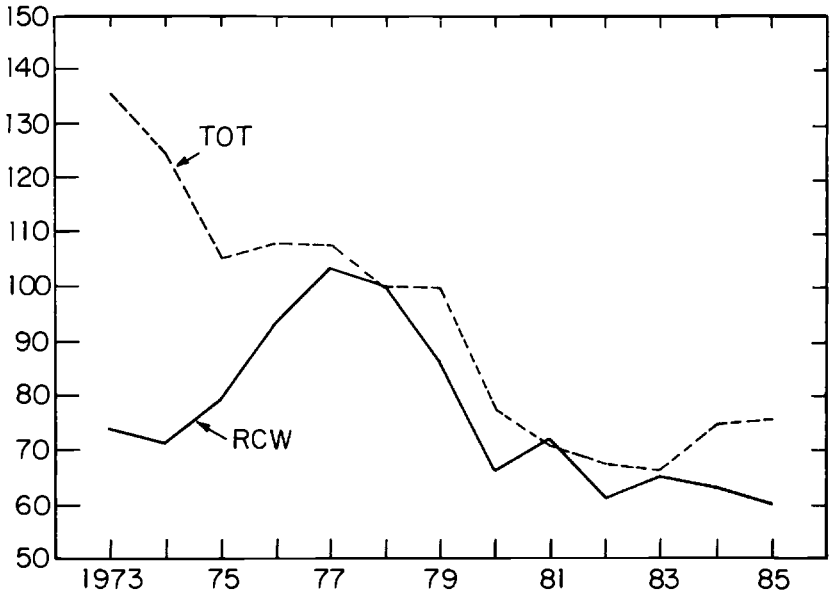

Fig. 5.1 Terms of foreign trade (TOT) and real consumption wages (RCW)

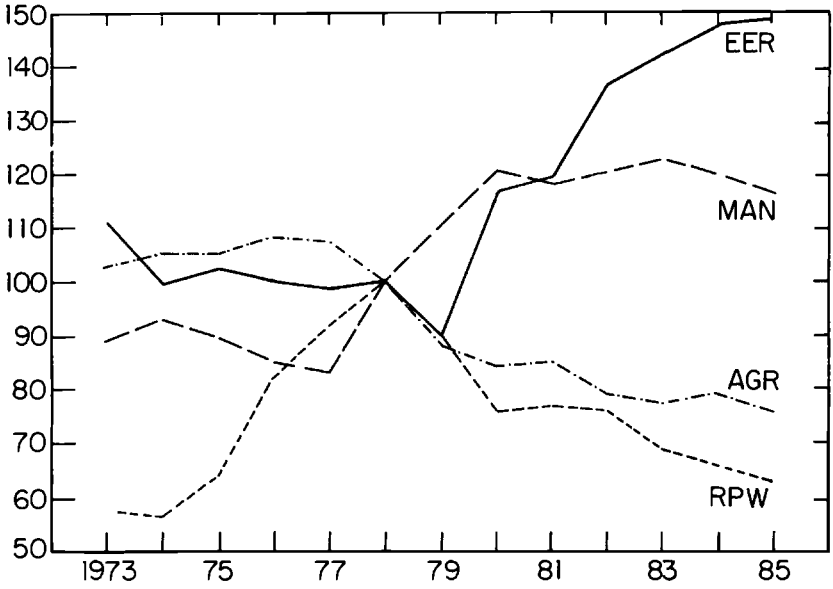

Fig. 5.2. Selected real prices (1978 = 100)

Note: EER is real effective exchange rate; AGR is agricultural net price; MAN is manufacturing net price; and RPW is real product wage.

argued that the flow equilibrium exchange rate in the mid-1970s was lower (in terms of TL/foreign currency) than the actual 1983 real exchange rate, the latter reflecting the effects both of the second oil shock and lower world agricultural prices. Derviş and Robinson (1978) estimated that the equilibrium exchange rate exceeded the actual parity by about 25 percent in 1976 and 50 percent in 1977. As shown in figure 5.2, the 1983 value of the real effective exchange rate exceeds the 1976–77 values by about 40 percent. And as analyzed further in chapter 6, the 1983 exchange rate was in fact overvalued with respect to the objective of greater trade liberalization as borne out by the actual outcome in 1984 and 1985. Besides exchange rate considerations, the 1983 base also reflects both price corrections (e.g., the SEE price adjustments) that were needed by the Turkish economy for budget balancing and stabilization. On account of such adjustments, and with the proviso that the 1983 exchange rate be considered to be close enough to its "equilibrium" level, the use of the 1983 price benchmark for the review of income-expenditure patterns in real terms appears to be broadly acceptable. Largely for convenience, we draw upon SPO (1985) data in our subsequent discussion.

5.3.1 Disposable Income

A largely unexploited data set in the existing literature on the Turkish economy is the available SPO statistics on the public-private split of the nation's disposable income, namely GNP. Public disposable income is the difference between the public sector gross revenue, including SEE profits and depreciation, and income transfers to the private sector and rest of the world, including interest payments. In turn, private disposable income is the residual between GNP and public disposable income. In Turkey's macroeconomic setting, a familiarity with the public-private split of GNP is essential to analyze income-expenditure patterns and overall saving (or resource mobilization) behavior (see tables A.1–A.4 in the stat. app.).

Figures 5.3 and 5.4 show the ratios of public and private disposable incomes to GNP both in current and constant 1983 prices during the 1973–83 period. These complementary figures point to the fact that the transfer of income to the public sector from the private sector, as a fraction of GNP, was larger in real terms than in nominal (current price) terms. In other words, the transformation in the structure of relative prices greatly increased the real purchasing power of the public sector, and its command over the economy's resources was enhanced more than the nominal-price series shows. Hence, in the post-1980 period, the shift in relative prices definitely favored the public sector over the private sector.

In turn, the rapid reduction in the share of private disposable income in GNP, in constant prices, was the major factor behind the restraint in private expenditures. This made export expansion possible from the viewpoint of demand management, as it moderated domestic absorption. The flip side of

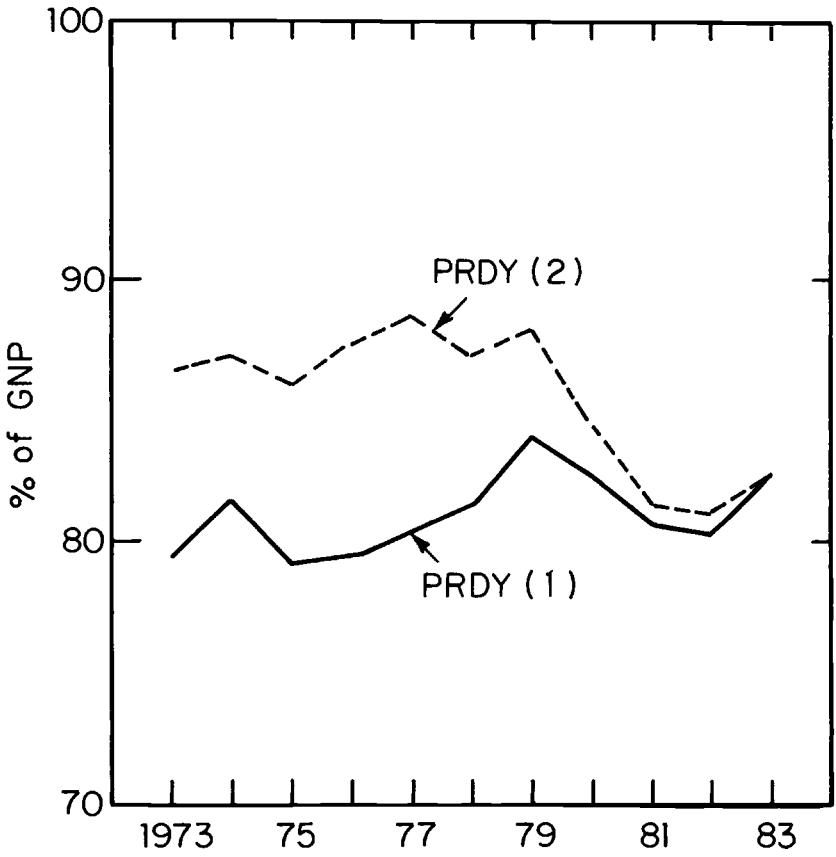

Fig. 5.3 Private disposable income (PRDY)
Note: PRDY(1) is PRDY/GNP in current prices; and PRDY(2) is PRDY/GNP in constant 1983 prices.

the coin was that the enhanced resources of the public sector, thanks to relative price changes, allowed public savings to rise, reducing the fiscal deficit. In general, an income transfer from the private sector to the public sector can reduce economywide expenditures only if the marginal propensity to save is higher for the latter than it is for the former. This was clearly the case in Turkey: the private sector matched its cut in income with cuts in expenditures, whereas the public sector used the transfer mostly to enhance savings rather than to expand expenditures.

5.3.2 Income-Expenditure and Savings-Investment Patterns

Table 5.5 presents data that show more precisely the impact of relative price changes on Turkey's macroeconomic balances. Parts A and B in this

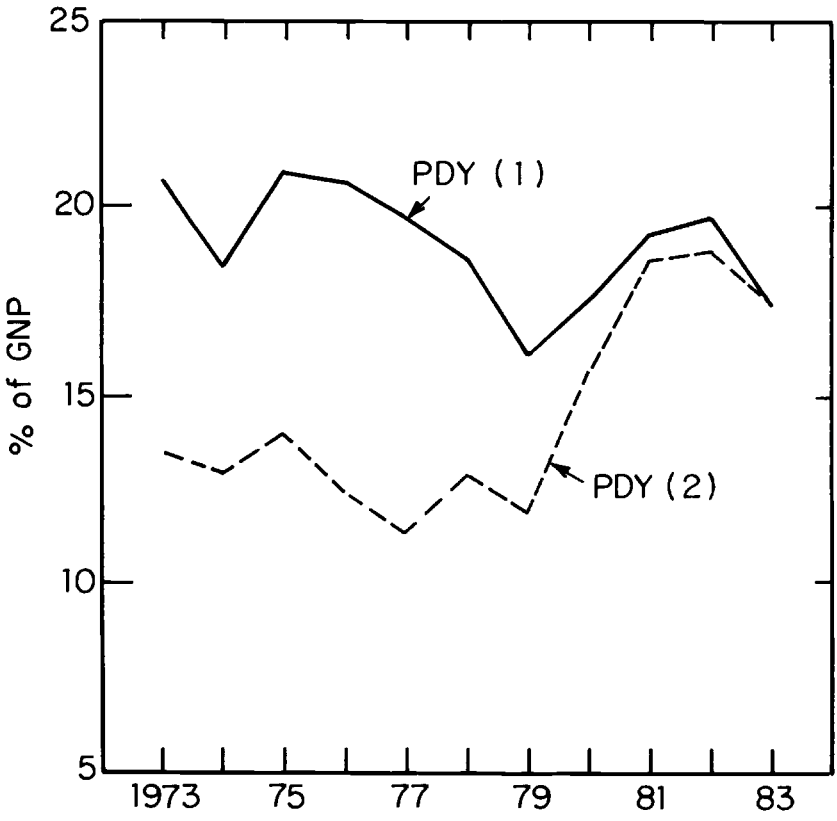

Fig. 5.4 Public disposable income (PDY)
Note: PDY(1) is PDY/GNP in current prices; and PDY(2) is PDY/GNP in constant 1983 prices.

table provide estimates for the savings-investment balances in current and constant prices, respectively. These comparative data indicate that the improvement in these balances from 1980 to 1983 was more substantial in the public sector than in the private sector, and more sharply so in real than in current prices.

Part C in table 5.5 displays data on the growth rates of real (domestic final) expenditures, which may be compared with the GNP growth rates given in the bottom row of the table. During 1978–79, the reduction in the current deficit and expenditures was engineered by import compression. From 1980 to 1982, the growth of expenditures at rates below the GNP growth was achieved through expenditure switching toward exports, which was induced by economywide price adjustments and supplementary export incentives. As is clear from the data, there was a setback in switching policy in 1983. After a reasonable attempt at expenditure restraint in 1984–85, the

Table 5.5 **Relative Price Effects on Investment-Savings Balances, and Growth of Real Expenditure, 1976–86**

	1976–77 Average	1978–79 Average	1980	1981	1982	1983	1984	1985	1986[d]
A. % GNP, current prices									
Investment	24.9	18.4	21.4	21.5	20.3	20.6	19.6	20.5	23.2
Private	12.5	8.9	9.9	8.3	8.3	9.1	9.6	9.5	11.0
Public	12.4	9.5	11.5	13.2	12.0	11.5	10.0	11.0	12.2
Domestic savings	19.1	16.0	15.9	18.0	18.1	16.5	16.8	18.6	21.0
Private	11.9	12.0	10.6	9.4	9.2	9.2	9.2	9.4	12.1
Public	7.2	4.0	5.3	8.6	8.9	7.3	7.6	9.2	8.9
Foreign savings[a]	5.8	2.4	5.5	3.5	2.2	4.1	2.8	1.9	2.2
Sectoral savings-investment balances									
Private	−0.6	3.1	0.7	1.1	0.9	0.1	−0.4	−0.1	1.1
Public	−5.2	−5.5	−6.2	−4.6	−3.1	−4.2	−2.4	−1.8	−3.3
Total (= − foreign savings)	−5.8	−2.4	−5.5	−3.5	−2.2	−4.1	−2.8	−1.9	−2.2
B. % GNP, constant 1983 prices									
Sectoral savings-investment balances[b]									
Private	−9.1	−1.1	−0.4	0.4	0.4	0.1	1.0	0.8	1.7
Public	−10.7	−7.7	−7.2	−5.3	−3.5	−4.2	−3.9	−2.7	−5.3
Total (= − foreign savings)	−19.8	−8.8	−7.6	−4.9	−3.1	−4.1	−2.9	−1.9	−3.6
C. Growth of Real Expenditures (% per year)[c]									
Private	8.2	−3.5	−6.3	−0.3	4.3	4.7	5.9	4.0	8.4
Public	11.4	−0.5	2.0	5.2	2.1	1.5	2.3	8.9	9.0
Total	8.9	−2.9	−4.7	0.8	3.8	4.0	5.2	5.0	8.6
Memo item (% growth per year):									
Real GNP	5.9	1.2	−1.1	4.1	4.6	3.2	5.9	5.1	7.8

Source: SPO (1985) and the central bank's 1986 Annual Report for 1977–83 and 1984–86 data, respectively.

[a]Current account deficit (after debt relief). The 1984–86 figures follow the revised presentation of the central bank for the balance of payments.

[b]See table A.2 for other data in constant 1983 prices.

[c]Domestic final expenditure excluding inventory changes.

[d]Provisional estimates.

control over demand management was considerably weakened in 1986, when there was also a slowdown in export expansion. In 1986 the current deficit/GNP ratio was higher in constant 1983 prices than in current prices, revealing a worsening trend in the external balance in real terms. The counterpart of this development was a rise in the external debt stock.

5.3.3 PSBR and Its Financing

Our estimates for the overall public sector borrowing requirement (PSBR) and its sources and financing patterns are given, as a percentage of GNP, in table 5.6 for the 1980–85 period. To draw attention to the initial conditions, this table also contains average figures for the 1978–79 period. As will be discussed further in chapter 8, the PSBR figures differ in their basic orders of magnitude from the public savings gaps. The differences have been due mainly to the valuation adjustments for SEE inventories.

The rise in public savings has contributed more to the reduction in public savings gaps than the restraint on public investment. The share of the nonfinancial SEEs in total public savings underwent a drastic change, going from a negative 25 percent in 1979 to a positive 14 percent in 1982 and 50 percent in 1985. SEE inventory management also began to improve in 1981. Hence the improved financial performance of SEEs, again mainly through wage-price adjustments, was a key factor in the adjustment process.

After the initial fall in 1981, the PSBR/GNP ratio remained high through 1985, averaging 5.8 percent in 1982–85. The share of the central bank in PSBR financing steadily declined, while the corresponding share of domestic borrowing increased rapidly from 1984 onward. The contribution of external borrowing to PSBR financing was substantial at the outset of the new

Table 5.6 **The PSBR and its Financing, 1978–85 (current prices, as a percentage of GNP)**

	1978–79 Average	1980	1981	1982	1983	1984	1985
Public savings-investment balance	−5.5	−6.2	−4.6	−3.0	−4.2	−3.3	−1.8
Public private capital transfer	0.0	−0.1	1.2	−0.1	−0.2	−1.3	−0.6
Inventory revaluation fund (SEEs)	−3.5	−3.9	−1.7	−1.5	−2.0	−3.0	−2.0
Increase in accounts payable, net	0.6	0.3	1.3	−0.3	1.1	−0.3	−0.5
PSBR	−8.4	−9.9	−3.7	−5.0	−5.3	−7.9	−4.9
Financing:							
External borrowing, net	2.2	3.2	2.5	1.0	1.4	2.7	0.5
Domestic borrowing	1.1	1.1	1.3	1.5	0.9	2.3	2.7
Long term	1.4	0.2	0.8	0.6	1.8	0.7	1.9
Short term (treasury bills)	−0.3	0.9	0.6	0.8	−0.9	1.6	0.9
Central bank, net	3.6	3.5	2.0	0.3	0.6	0.7	1.3
Other[a]	1.5	2.2	−2.2	2.2	2.3	2.1	0.4

Source: SPO and the central bank of Turkey.

[a]Includes changes in holdings of deposits and currency, SEE arrears, and errors and omissions.

program, facilitating the pursuit of financial stabilization in the Turkish economy. Further details on public finances will be covered in chapter 8.

5.3.4 Current Account Deficits and Imports

The continuation and intensification of the economywide price distortions in the mid-1970s were enabled by heavy external borrowing. This observation is reinforced by figure 5.5, which shows the time patterns of the current (account) deficit as a fraction of GNP, both in current and constant price terms over the 1973–83 period.

At the prevailing official exchange rates Turkey's GNP was unduly overstated in U.S. dollars in the mid-1970s, giving rise to a gross underestimation of the current deficit/GNP ratio, which at the time may not have looked alarming to most observers. At constant 1983 prices, however,

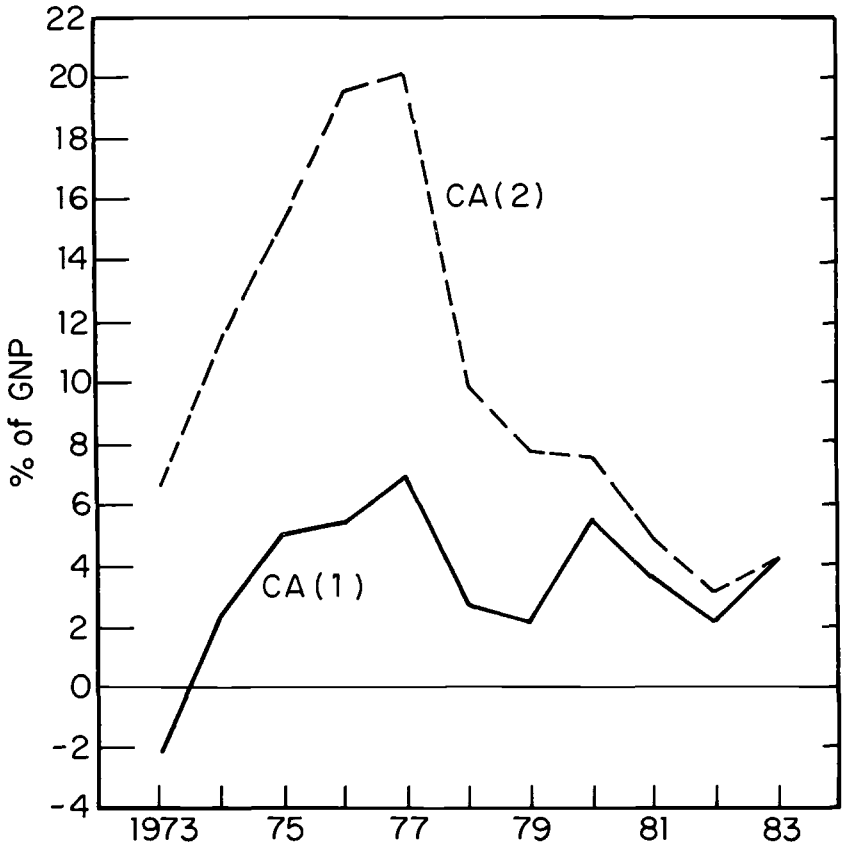

Fig. 5.5 Current account deficit (CA)
Note: CA(1) is CA/GNP in current prices; and CA(2) is CA/GNP in constant 1983 prices.

this ratio was nearly 20 percent in 1976–77 and fell to about 9 percent in 1978–79. Accompanying this belated adjustment was a drop in real imports as shown in the tabulation of trade ratios in table 5.7.

These official estimates may possibly contain some measurement errors. Nonetheless, they underline three simple, yet highly significant points. First, the scale of imports was unsustainable in 1976–77, but could not be evaluated realistically in current prices. The immediate problem in 1977 was not so much the adverse allocational effects of microlevel distortions produced by the trade regime, but rather the sheer size of merchandise imports to which the economy had become dependent in a structurally rigid way. This unsustainable pattern collapsed from the inherently destabilizing form of external borrowing described in chapter 2. Second, the import/GNP ratio in real terms was the same in 1980 as in 1979, which was an achievement in the face of the steep rise in the world oil price in 1980. This was made possible by the large-scale emergency financing extended to Turkey in the first year of the 1980–85 program. Third, the import/GNP ratio recovered only mildly in 1981–82 but, as the share of capital goods in total imports declined, there was increased scope for intermediate goods imports. This in turn made it possible to increase capacity-utilization rates and to embark on an export-led recovery in output.

5.4 Money and Credit

An integral part of the changes in the macroeconomic setting was the shifts in the money and credit system. Table 5.8 provides a summary of data on the major monetary variables and credit patterns.

As discussed earlier in section 4.7 of chapter 4 in the context of quarterly data, the real demand for broad money (M2) responded favorably to the switch to positive real interest rates on time deposits. The new interest rate policy reversed the upward trend in the income velocity of M2 in the pre-1980 period and contributed to lowering the velocity from 5.0 in 1980 to about 3.5 in the 1982–85 period.[6] A monetary modeling exercise by Fry (1986) suggests that the positive deposit rates contributed to the avoidance of protracted recession in the early 1980s through increased availability of

Table 5.7 **Trade Ratios (as a percentage of GNP, constant 1983 prices)**

	1976–77	1978	1979	1980	1981	1982	1983
Exports (f.o.b.)	5.1	5.8	4.7	5.3	8.5	10.1	11.6
Imports (c.i.f.)	26.8	18.1	16.2	16.2	17.4	16.6	18.1
Trade deficit	21.7	12.3	11.5	10.9	8.8	6.5	6.5
Current deficit	19.8	10.0	7.7	7.6	4.9	3.1	4.1

Source: SPO (1985).

Table 5.8 Money and Credit Indicators, 1978–85[a]

	1978	1979	1980	1981	1982	1983	1984	1985
A. Money multipliers								
M1/MB (monetary base)	1.3	1.4	1.5	1.2	1.1	1.2	0.8	0.7
M2/MB	1.5	1.6	1.8	2.0	2.2	2.1	1.9	1.9
B. Income velocity								
GNP/MB	6.0	6.8	9.3	8.0	7.4	7.3	6.7	6.4
GNP/M1	4.6	5.0	6.3	6.7	6.5	5.9	8.1	8.6
GNP/M2	3.9	4.2	5.0	4.0	3.4	3.5	3.5	3.4
C. Domestic credits (DC)[b]								
M2/DC	0.6	0.7	0.7	0.8	1.0	1.0	1.2	1.2
GNP/DC	2.5	2.8	3.3	3.2	3.3	3.3	4.3	3.9
D. Domestic credits (%)[b]	100	100	100	100	100	100	100	100
by: Deposit money banks	56	56	59	64	66	70	72	77
Investment banks	20	17	13	12	13	13	11	8
Central bank	24	27	28	24	21	17	17	15
to: Public sector	49	50	48	40	37	32	28	29
Treasury			14	13	12	10	12	11
Public enterprises			34	27	25	22	16	18
Private sector	51	50	52	60	63	68	72	71

Source: Central bank of Turkey and OECD (1986).

[a]Figures are rounded to the nearest unit.

[b]Net of central bank advances to the banks.

credit (which is largely the counterpart of M2) to finance working capital, an important complementary input in the production process.

With the reduction of the PSBR/GNP ratio and decreased public sector reliance on the central bank, important shifts occurred in the structure of credits. The share of direct central bank credit (to the public sector) in total domestic credit could be reduced from 28 percent in 1980 to 17 and 15 percent in 1983 and 1985, respectively. The SEE share in direct central bank credit was reduced to 13 percent in 1985 from about 50 percent in 1980. Consequently, the reduced credit demand by the SEEs enabled the rise in the private sector's share in total domestic credit from 52 percent in 1980 to about 72 percent in 1984. In this context, the rise in export credits was much faster than total credit expansion.

5.5 Anatomy of the Adjustment Process: A Summary

The analysis of macroeconomic prices and balances in sections 5.2–5.4 complements the review of the actual performance in section 5.1. Our discussion has focused on the importance of preexisting conditions and on the heavily price-based policy mix.

Prior to the 1980 program, Turkey's adjustment to the reduced capital inflows relied on import reduction and inflationary compression of domestic real expenditures, resulting in the loss of policy credibility at home and

abroad. Under such initial conditions, conventional wisdom suggested an export-oriented orthodox shock treatment, which had a chance to work in the absence of indexed price and wage adjustments. Having decided on the shock treatment option, policymakers relied heavily on sharp changes in the macroeconomic price structure, which in turn had vast consequences for unprotected income groups in the Turkish society.

The exchange rate depreciation, SEE price hikes, and switch to positive real interest rates induced both income and substitution effects. The price corrections caused a transfer of real incomes to the public sector from the private sector, making a direct contribution to resource mobilization by the former. The reduction in private disposable income led to the contraction of private expenditures, with the brunt of adjustment falling on import-intensive and interest-rate-sensitive components such as private fixed investments. The price-induced contraction of domestic demand (mainly for traded goods) provided room for export expansion, which was stimulated by a strong dose of price and nonprice incentives, as well as real wage cuts.

The initial stage benefited from large-scale external financial assistance and debt relief, which eased the trade- and budget-correction problems, especially under the difficult circumstances of the 1979–80 oil shock. SEE price hikes resulted in larger operating surpluses, reducing dependence on central bank financing. The resources of the central bank could be channeled to the private sector on a larger scale through the banking system.

After attaining a rise in exports, policy was increasingly turned to the liberalization of the Turkish economy. The liberalization reforms required a further depreciation of the exchange rate to compensate reductions in quantitative restrictions on imports. After contributing initially to price stabilization, the adjustment in macroeconomic prices remained as the key policy tool used to sustain the liberalization effort and strengthen savings generation in the Turkish economy (through SEE price hikes to boost public savings). In turn, a heavy and continual reliance on economywide price changes prevented smooth and steady reductions in the rates of domestic inflation.

The counterparts of the exchange rate depreciation, SEE price hikes, and switch to positive deposit rates were lower real wages and salaries in the urban sector and worsened domestic terms of trade for the agricultural sector, which absorbs the bulk of employment in Turkey. The distributional consequences of these relative price shifts are reviewed in the next section.

5.6 Employment, Income Distribution, and Poverty

As in most semi-industrial countries, employment and distributional statistics are generally less reliable and precise than the national accounts data. The predominance of the informal components of the rural and urban sectors gives rise to notorious measurement problems. The overriding

concern (of richer households) with tax liability results in underreporting of nonwage incomes in household surveys, which are not undertaken on a regular basis. Furthermore, the researchers often eschew consistency checks on the overall patterns suggested by population censuses and sectoral income aggregates. While being aware of these problems, we nevertheless believe that the available statistics permit a broad intertemporal evaluation of employment and distributional characteristics, provided we maintain our focus on proportional shifts over time. The presentation of this section draws on earlier detailed studies by Celâsun (1986a, 1986b).

Table 5.9 provides data on sectoral employment and productivity differentials for the benchmark years 1973, 1978, and 1983. The productivity differentials have been estimated in constant 1973 prices and in current prices. The differences in constant price and current price estimates reflect relative changes in the net prices (or alternatively, domestic terms of trade) of the major activity sectors of the Turkish economy.

As regards the employment picture, table 5.9 shows the predominant position of agriculture in labor absorption and the limited employment generated by manufacturing, as noted in the cross-country comparisons in chapter 1. Compared with the 1973–78 period, the creation of new nonagricultural employment was much less in 1978–83, despite a massive cut in nonagricultural real wages. It is evident that factor substitution faces structural rigidities in the short and even medium run. Labor reallocation requires time and new capital formation in structurally rigid semi-industrial economies.

Table 5.9 **Sectoral Employment Levels and Productivity Differentials, 1973–83**

	Employment (thousand workers)			Productivity Differentials[a]				
				Constant 1973 Prices			Current Prices	
	1973	1978	1983	1973	1978	1983	1978	1983
1. Agriculture	9,580	9,537	9,451	1.0	1.0	1.0	1.0	1.0
2. Nonagriculture								
a. Mining and energy	160	217	226	5.9	7.3	4.7	6.0	10.2
b. Manufacturing	1,419	1,610	1,685	4.2	3.9	4.4	4.6	7.1
c. Construction	456	562	586	4.0	3.5	3.3	3.6	3.5
d. Trade	544	646	696	8.0	7.7	7.9	8.1	12.9
e. Public services	682	1,083	1,204	6.1	3.9	3.9	3.9	3.3
f. Other services	1,417	1,594	1,720	4.8	5.0	4.3	5.0	6.3
g. Subtotal (a to f)	4,678	5,712	6,126	5.1	4.7	4.6	4.9	6.5
3. Total	14,258	15,249	15,577	—	—	—	—	—

Source: Celâsun (1986b).

[a]Productivity differentials are measured by the ratios of per worker value added in agriculture to per worker value added in other sectors.

If relative prices had remained constant between 1978 and 1983, sectoral productivity differentials would have exhibited the normally expected pattern, involving reductions in the ratio of per-worker-value-added in nonagriculture to per-worker-value-added in agriculture. Such a trend would have reduced income disparities in Turkey. However, measured in current prices, this ratio increased in a highly pronounced fashion after 1978. At the sectoral level, the observed changes in productivity differentials caused sizable income transfers from agriculture and public services to mining and energy, manufacturing, and trade sectors.[7]

In this context, it may be noted that the ratio of the value-added aggregate of the (wholesale and retail) trade sector to agricultural value added increased to 93 percent in 1983 from 55 percent in 1978. This was a significant distributional shift, considering the fact that trade sector employment was about 0.7 million workers as compared with 9.5 million workers absorbed in agriculture in 1983.

After the review of productivity differentials and implied shifts in sectoral incomes, we may consider the proportional changes in factor shares, i.e., functional distribution of income as shown in table 5.10 for the benchmark years 1978, 1981, and 1983. Part A in this table gives the labor market aggregates, which point to the high levels of surplus labor in the Turkish economy.[8] With the virtual termination of labor migration to Western Europe, Turkey's rapid population growth—in combination with the remaining underemployment in agriculture—is likely to aggravate the unemployment problem in the future.

Part B in table 5.10 provides estimates for economywide factor shares derived from the general equilibrium analysis of Celâsun (1986a), which is calibrated to the official employment and wage data. Part C gives factor shares for the large manufacturing industry. For lack of relevant details, agricultural income in part B covers all income elements in this sector. The data point out the rapid reduction in the share of formal wage income (including civil servant salaries) in GDP from 33 percent in 1978 to about 21 percent in 1981, which reflects in a cumulative way the workings of the 1979–80 inflation and price adjustments.[9] Part C data have a more narrow coverage, but largely confirm the falling wage shares in the post-1978 period.

An earlier study by Derviş and Robinson (1980) examines the structure of income inequality in Turkey on the basis of household survey data for 1973. It concludes that the rural-urban household income differential is unusually large in Turkey and a major source of overall inequality in the size distribution of income. Taking this study as a point of departure, the analysis in Celâsun (1986b) provides synthetic estimates for inequality and poverty measures for the benchmark years 1973, 1977, and 1983 on the basis of all available national income, employment, and distributional data in Turkey. The estimated Gini coefficients for 1973, 1978, and 1983 are 0.515, 0.509,

Table 5.10 **Labor Market and Functional Distribution of Income, 1978–81**

	1978	1981	1983
A. Labor market (thousand workers)[a]			
1. Employment	15,250	15,370	15,580
2. Labor supply	16,640	17,620	17,775
3. Surplus labor	1,390	2,250	2,195
B. Functional distribution of nominal GDP (f.c.), %			
1. Agricultural income	25.3	22.5	19.7
2. Nonagricultural income			
a. Formal wage labor[b]	33.2	21.4	20.8
b. Nonwage labor	6.7	4.6	4.3
c. Gross profits	34.8	51.5	55.2
3. Total (= GDP)	100.0	100.0	100.0
C. Factor shares in large manufacturing, %			
1. Private			
a. Nonprimary inputs	61.7	66.0	66.9
b. Wages	12.7	9.6	8.7
c. Gross profits	25.6	24.4	24.4
d. Total (= gross output)	100.0	100.0	100.0
2. Public			
a. Nonprimary inputs	58.9	68.7	64.5
b. Wages	19.9	12.9	8.7
c. Gross profits	22.1	18.4	26.8
d. Total (= gross output)	100.0	100.0	100.0

Source: Celâsun (1986a) for parts A and B, and TUSIAD (1986) for part C.

Note: f.c.: factor cost.

[a]Rounded figures.

[b]Includes government employee salaries.

and 0.522, respectively (see tables A.27 and A.28 in the stat. app.). The share of households under the poverty line (about 12,000 TL in 1973 prices and $1,455 in 1983 prices) is estimated as 32, 25, and 30 percent in these three benchmark years. The estimated real mean income growth rates for top decile and bottom decile are 22.7 and 22.8 percent in 1973–78, and −8.4 and −18.6 percent in 1978–82, respectively.

This review of labor and distributional indicators brings out two main points. First, the heavy external borrowing of the mid-1970s temporarily allowed an improved income distribution. Second, the mechanisms used in extricating the economy from the crisis produced by the mismanagement of the macroeconomic balances and external debt mechanisms in 1974–77, namely large shifts in economywide prices, led to a dramatic reversal in distributional trends.

5.7 Recapitulation

How do we interpret the relatively successful adjustment of the Turkish economy in the post-1980 period? It seems clear that the radical changes in the structure of relative prices and the attendant shifts in patterns of income

distribution, were the key internal mechanism in attaining inflation reduction and initiating export-led recovery. Our review pinpointed the key role of economywide price changes, which produced demand restraint, enhanced savings performance in the public sector, greater financial intermediation, and expenditure switching toward exports. While the pre-reform (1978–79) period had already set into motion some of these changes, especially the decline in real wages and agriculture's terms of trade, the policies of the 1980s consolidated and accentuated them. The structural rigidity inherited from the previous inward-oriented policies served to magnify the requisite changes in relative prices needed to bring about the desired consequences. The net effect was a substantial increase in the profitability of the traded manufactures sector and a sharp reduction in labor and farmers' incomes. On the whole, these also implied an improvement in the terms of trade of the public sector vis-à-vis the private sector, which proved the key to the reduction of real private expenditures. Since the public sector is a high saver at the margin, these relative price changes not only resulted in expenditure switching, in the conventional manner, but were also instrumental in reducing absorption.

This chapter has also shown the favorable macrolevel impact of external financial assistance in the earlier years of Turkey's post-1980 program. The rise in debt-service ratios after 1983 poses new policy problems, however, as will be discussed in later chapters.