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INCOME DISTRIBUTION AND EMPLOYMENT ASPECTS OF TURKEY'S POST-1980 ADJUSTMENT

Merih CELASUN*

Against the backdrop of a mild improvement in countrywide income distribution in Turkey from 1973 to 1978, the available evidence on the nature and direction of distributional shifts are examined for the 1978-88 period. The characteristic features of formal planning and de facto policies for the labor market are also outlined. The paper interprets the post-1980 distributional changes in the context of heavy policy reliance on relative price changes in the economy to reduce absorption, promote exports, and strengthen domestic resource mobilization processes. The distributional impact of the rise and fall in external borrowing is broadly discussed.

1. INTRODUCTION

Against the background of payments-cum-growth crisis of heavily in debted countries in the mid-1980s, Turkey's post-1980 economic experience

(*) Professor, Department of Economics, Middle East Technical University (METU), Ankara. The author wishes to thank Bahattin Gulgor and Mehmet Polat of the State Planning Organization (SPO) for helpful discussions on labor market estimates. Financial support from the METU Research Fund is gratefully acknowledged. An earlier version of the paper was presented at the Symposium on " Institutional Aspects of the Economic Integration of Turkey into the European Community," organized by te HWWA-Institute for Economic Research in Hamburg on October 23-25, 1989. The present text will also be published in a book in the HWWA Publication Series, under the title of the Symposium, edited by H. Korner and R. Shams. The usual disclaimers apply.

presents itself as an effective application of "adjustment with growth concept" advanced by international financial organizations. Turkey's debt debacle arrived early in 1977, and was followed by a deep crisis in 1978-79, featuring sharp cutbacks in import volumes and severe commodity shortages. From 1980 on , the Turkish economic policy was transformed from an inward-oriented stance to an outward-looking orientation with a greater reliance on private sector in the productive sphere, allowing a larger scope for market forces.

Turkey's average GDP growth rate of 5.6 percent in 1980-87 compares favorably well with 2.4 percent average annual growth in middle income developing economies, and 1.1 percent in heavily indebted countries during the same period.[1] Turkey's post-1980 growth performance has also been associated with a large rise in the export/GNP ratio, and an uninterrupted external debt servicing, which reached critically high levels after 1985.

The post-1980 adjustment episode remains an unfinished business, however. On the eve of the 1990s, the policy-makers have to contend and cope with persistent inflation, large fiscal deficits, deteriorated income distribution, and lagging investments in manufacturing, which served as an engine of export-led growth in the 1980s. In 1988, despite a sizable cut in the budget deficit, inflation rate increased (from 40 percent in 1987) to about 70 percent, and GDP growth dropped (from 7.5 percent) to 3.5 percent, indicating the workings of deep-seated structural factors, and entrenched inflationary expectations. In mid- 1989, the Turkish government chose to respond, albeit in a haphazard and partial way, to worsened income distribution by sharply raising public-sector wages, thereby leaving budgetary prospects more ambivalent than before.

From the perspective of judging its applicability as an adjustment model for other indebted middle-income countries, Turkey's post-1980 experiment needs to be evaluated with care, especially by noting two country-specific factors. First, Turkey had benefited greatly from a massive debt-rescheduling, and an unusually sizable package of new external borrowing in

the earlier stages of its economic recovery. Thus, the initially contractionary effects of financial stabilization, trade liberalization and steep devaluations were largely avoided. An ex-post general equilibrium analysis suggests that the social marginal productivity of external loans was nearly 35 percent (in real terms) in the early 1980s.[2] It is evident that non-economic factors (such as Turkey's NATO connection and its security prospects) played a crucial role in bringing out such a large-scale rescue package.

Secondly, the presence of a military regime from September, 1980 to November, 1983, and subsequently a restrictive constitutional order in the post-1983 period contributed to the avoidance of open socio- political conflicts in the adjustment process, which resulted in wide distributional shifts with unfavorable effects on agriculturalists and urban labor. After a prolonged paralysis of internal politics in the late 1970s, the military arrangements produced an administrative setting, which facilitated the implementation of politically difficult measures that resulted in major alterations in the wage-price structure.

The underlining of these two special factors should not be construed as downplaying other policy elements. The Turkish adjustment achieved a credible cut in domestic absorption, especially during 1980-85, to provide room for export expansion. With the full support of multilateral institutions (particularly World Bank), the authorities maintained a strong interest in supply-side measures, which aimed at improved capacity utilization in manufacturing, capacity expansion in energy, transport and communication sectors, and large incentives for exports and financial savings. The demand management, resource mobilization, and supply-side measures relied heavily, however, on changes in the relative price system, which led to a further worsening of Turkey's already unbalanced income distribution. As restrictive institutional arrangements are gradually loosened in the future, distributional issues are likely to emerge as important and potentially destabilizing themes in the domestic political process.

This paper eschews the broader task of analyzing the inner workings of various phases of Turkey's recent adjustment experience. Ex-post assessments in that direction may, for example, be found in recent studies by Wolff(1987), Baysan and Blitzer(1990),and Celasun and Rodrik(1990). The purpose of the present paper is to provide an interpretive review of basic available data on income distribution and employment aspects of recent Turkish economic experience. The time frame of employment review is from 1978 to 1988, a period for which two variant labor series are available. To show the structural break in distributional trends, which occurred from 1979 onwards, available data on real wages, factor shares, and inequality measures are presented for the 1973-88 period. In this context, it may be recalled that Turkey's three consecutive five-year development plans, namely Third Plan(1973- 77), Fourth Plan(1979-83) and Fifth Plan(1985-89), cover the post-1973 oil-crisis period up to the late 1980s. From the policy point of view, the post-1973 adjustment episodes have somewhat different periodization as discussed later (at the end of Section 2) in the paper.

The remaining part of the paper is organized around three additional sections. Section 2 gives structural and policy background to distributional and employment assessment in Turkey. In Section 3, the observed changes in intersectoral productivity differentials , real wages, factor shares, and other distributional parameters from 1973 to 1988 are documented and evaluated. Finally, Section 4 recapitulates policy lessons and implications.

Before proceeding with the review of Turkey's labor market and income distribution trends, a caveat is in order as regards the quality of relevant historical data. The presence of a large block of nonwage labor with irregular work and payroll arrangements gives rise to difficult measurement problems as regards the recording of countrywide employment, unemployment and wage movements. In the similar vein, household income and expenditure surveys do not yield consistent and reliable measures in an institutional setting where family-based, informal and tax-evading business arrangements predominate certain major sectors such as agriculture and services with diverse sources of earnings. Unstratified sampling procedures of

household surveys often fail to capture the true income size of richer households in the urban sector. These are common and familiar problems, however, in semi- industrial countries with semi-developed payroll, tax and social security systems. Under such data limitations, we strive to focus on broad structural features and major proportional shifts over time with an eye to policy-oriented interpretation.

2. BACKGROUND TO DISTRIBUTIONAL AND EMPLOYMENT ASSESSMENT IN TURKEY

Preliminaries

Countrywide income distribution may be analyzed basically in three forms : (1) functional distribution (indicating factor shares in value added), (2) socio-economic grouping of incomes (differentiating shares of occupationally and socially distinct groups), and (3) size distribution, which normally takes households (rather than persons) as income recipient units in most semi-indistrial countries. For short- and medium-term policy analysis, the first two are more relevant, and may efficiently be analyzed within the framework of social accounting matrices.[3] For more thorough assessments, wealth distribution data should also be reviewed to discern trends in ownership patterns of assets (physical, financial and human capital). Obviously, shifts in wealth distribution affect income patterns in the long-run.

The overall inequality in size distribution is determined by the interplay of three sets of factors : (1) differences in the mean incomes of income groups, (2) population shares, and (3) within-group inequalities in the system.

Decomposition analysis for overall income inequality in Turkey shows that agricultural-nonagricultural split in household population is highly meaningful, because the wide difference observed between the mean incomes of these two major groups is the main explanatory factor for the overall inequality measure.[4] Moreover, the within-group inequality is considerably larger in the agricultural household block, reflecting interregional yield dif-

ferentials on the one hand, and skewed land distribution on the other. For a given proportion of household populations, wider(narrower) the gap between the mean incomes of agricultural and nonagricultural housekols, larger(smaller) the countrywide income inequality.

In the nonagricultural household block, within-group inequality for wage labor is substantially less than within-group inequality of nonwage recipients (industrialists, merchants, professionals, artisants and rentiers). Hence, for a given set of population weights, smaller (larger) the income share of wage earners, larger(smaller) the income inequality for nonagricultural households, and for countrywide population.

These preliminaries suggest that the sectoral structures of value added and employment, and major characteristics of labor force need to be reviewed, before examining distributional and labor-market trends in Turkey.

Broad Structural Features

In a cross-country comparative context, Turkey's development process in the post-1963 period (after the adoption of formal planning in 1962-63) has yielded a relatively large rise in the share of industry, and correspondingly a rapid decline in the share of agriculture in total value added. In turn, a similar performance has not been observed in the area of employment generation.

Table 1 provides data on the sectoral composition of value added and employment, and educational level of labor for major South European countries in the post-1965 period. These data underline the predominant position of agriculture in Turkey's labor market, despite the large fall in the share of agriculture in GDP.

While the share of industry (including construction) in GDP is almost the same (around 36 percent) for Spain and Turkey, the share of this sector

Table 1: Selected Comparators for South European Countries

	Agriculture		Industry[a]		Services	
A. GDP(%)	1965	86	1965	86	1965	86
Portugal	..	10	..	40	..	51
Spain	15	6	36	37	49	56
Greece	24	17	26	29	49	54
Yugoslavia	23	12	42	42	35	46
Italy	11	5	41	39	48	56
France	8	4	39	34	53	64
Turkey	34	18	25	36	41	46
B. Labor Force(%)	1965	80	1965	80	1965	80
Portugal	38	26	30	37	32	38
Spain	34	17	35	37	32	46
Greece	47	31	24	29	29	40
Yugoslavia	57	32	26	33	17	34
Italy	25	12	42	41	34	48
France	18	9	39	35	43	46
Turkey	75	58	11	17	14	25

C. Educational Level of Labor Force(%)	Absence of Primary	Primary	Secondary	Higher Education
Portugal(1981)	16.3	61.5	16.2	5.8
Spain(1983)	13.5	57.1	19.6	9.7
Greece(1984)	3.9	56.9	27.8	11.3
Turkey(1985)	28.5	60.0[b]	7.7	3.8

Source: World Bank(1988) for panels A and B; SPO(1989) for panel C.

Notes: a/ Industry includes mining, energy, manufacturing and construction.
b/ Including middle-school graduates.

in total employment was 37 percent in Spain and 17 percent in Turkey in the early 1980s. In mid-1980s (see also Table 3), agriculture absorbed nearly 60 percent of Turkey's labor force, while this absorption rate in 1980 was 31, 26 and 17 percent for the new EC members Greece, Portugal and Spain, respectively. It is evident that Turkey's industrialization process has not been effective in the way of achieving a satisfactory pace of structural transformation in employment generation.[5]

For a country of Turkey's population size and income level, cross-country regressions for sectoral shares of labor and value added predict the value of 2.6 as the ratio of per worker value added in nonagriculture to per worker value added in agriculture (Celasun, 1983). The observed values of this so-called Kuznet's ratio far exceed the predicted values in Turkey, implying the presence of wide gaps between rural and urban income levels. As noted earlier, the unusually wide rural-urban differentials explain a large portion of overall income inequality in the country. An analysis of the behavior of this ratio over time is pursued in Section 3.

Panel C in Table 1 compares the educational levels of labor force in Turkey with those observed in Portugal, Spain and Greece. It is evident that Turkey has the largest share of labor force with no primary education, and smallest shares for secondary and higher educational levels. The household labor surveys in Turkey reveal that labor with no primary education is absorbed mainly in agriculture.

Table 2 : Employment Status of Labor (percent)

	1972	1982	1987
Wage labor[a]	24.5	28.6	35.9
Employer	1.1	1.1	3.6
Self-employed	27.3	26.5	26.6
Unpaid family workers	47.1	43.8	33.9
Total	100.0	100.0	100.0
Addendum : Total(in million workers)	14.0	15.5	..

Source: SPO(1985,Table 345) for 1972-82
SIS(1989) for 1987 (household income and expenditure survey)

Note: a/ Wage labor covers wage-salary earning workers, including government employees (civil servants).

Table 2 provides complementary data on the characteristics of Turkey's labor force, showing changes in the employment status of engaged persons (i.e., labor demand) from 1972 to 1987. For the 1980s, the figures show that about 65 to 70 percent of total employment remains in the non-wage status, the predominant portion of which represents unpaid family workers, mainly in agriculture. These data underline the importance of bearing in mind the limited share of wage labor in total employment in interpreting the estimated factor shares in national income.[6]

The data presented in Tables 1 and 2 bring out clearly the difficult nature of two long-term planning issues in Turkey : (1) how to efficiently reallocate labor from low-productivity agriculture to higher-productivity non-agricultural sectors, and (2) how to mobilize and use resources to upgrade the educational level and skill content of Turkey's rapidly growing labor force under constrained government expenditures.

Labor Market

The existence of a large block of nonwage labor with numerous forms of underemployment in agriculture and services creates intractable problems of measurement and estimation for the Turkish labor market. Population censuses and household labor force surveys produce intertemporally inconsistent raw data, the reconciliation of which requires expert judgment and pure guesswork. The historical series for labor market have been altered each time a new five-year plan is drafted. Sidestepping the discussion of data reconciliation problems, we provide in the present paper two sets of labor market aggregates for the benchmark years 1978, 83, and 88, using data base for (1) the Fifth Plan (1984-89) and its annual programs, and (2) the Sixth Plan (1990-94), which has been formally legislated in mid-1989. Both sets of data pertain to civilian labor supply and demand, excluding military forces, and are derived by the State Planning Organization(SPO).

Panels A to C in Table 3 show data adopted in the Fifth Plan preparation and implementation studies. These data provide an explicit estimate for

Table 3: Labor Market Aggregates, 1978-88 (in thousands)

	1978	1983	1988
A. Population	42830	47760	53250
Population aged 15-64	25450	29230	33560
Participation ratio(%)	65.2	60.8	56.9
B. Domestic civilian			
Labor supply	16595	17773	19085
Labor demand			
Agriculture	9537	9450	9300
Nonagriculture	5712	6127	7567
Total	15249	15577	16867
Surplus labor			
Agriculture	720	665	530
Nonagriculture	1346	2196	2218
Total	2066	2861	2748
C. Surplus ratio(%)			
Agriculture	4.3	3.7	2.8
Nonagriculture	8.1	12.4	11.6
Total	12.4	16.1	14.4
Addenda :			
Labor stock abroad	751	1006	1058
Unemployment registered	165	626	1163
Social security coverage[a]	4346	5160	7245
SPO revised series[b]			
Labor supply	15158	16662	18350
Labor demand			
Agriculture	7730	7852	8369
Nonagriculture	6246	6797	8181
Total	13976	14649	16550
Unemployment	1182	2014	1800
Unemployment ratio(%)	7.8	12.1	9.8

Source: SPO(1985) and Annual Programs for the Fifth Plan. Population figures are inferred from data in OECD(1988, Table 4).
Notes : a/ Includes actively insured self-employed persons.
b/ SPO(1989,Table 347) for revised civilian labor data .

agricultural labor surplus, which is incorporated in agricultural labor demand.

The agricultural labor surplus is a crude estimate for disguised unemployment during the peak-work season. The nonagricultural labor surplus measures all remaining unemployed labor, including discouraged persons who do not actively search for jobs through the Labor Placement Office(IIBK). The ratio of the sum of agricultural and nonagricultural labor surplus to civilian labor supply gives the economywide unemployment rate . The latter rate climbed to 16 percent in 1983 from 12.4 in 1978, reflecting the slowdown in employment expansion in the early 1980s. In conjunction with accelerated GDP growth in 1984-87, the economywide unemployment ratio declined to 14 percent in 1988, although the estimated number of unemployed remained around 2.8 million persons from 1983 to 1988.

The revised labor data base for the Sixth Plan is summarized as addenda to Table 3. The revised figures are essentially based on the 1988 (countrywide) household labor force survey data, with backward extrapolations extending to 1978. The historical estimates for nonagricultural employment are derived by applying labor-output elasticities, which are based largely on expert judgment. Agricultural labor demand is extrapolated backward in such a way as to yield sectoral proportions for employment, which seemed "plausible" to the SPO officials.

In the revised series, the agricultural labor surplus is not estimated, and therefore it is not included in agricultural labor demand. It appears that the revised series overstates employment expansion in agriculture from 1978 to 1988 as the reported number of agricultural active population remains more or less constant in population censuses held in 1975, 80 and 85, at around 9.5 million engaged persons in the 15-64 age group. In our view, the revised series underestimate the absolute level of unemployment, although the movement of revised unemployment rates roughly resembles the behaviour of nonagricultural labor surplus rates in the Fifth Plan series.

In both historical series, labor force participation rates show a steady decline over time. A closer examination indicates that participation rates decline faster for women than men, mainly in response to agricultural mechanization, and expansion of secondary and higher education opportunities for girls. For males, population aged 15-24 also exhibits a declining trend in participation rates, because of expanding school enrollment.

The end-year stock of those unemployed, seeking work and registered with the Labor Placement Office has shown a rapid increase from 0.6 million in 1983 to 1.2 million in 1988. In the absence of unemployment benefits, the registered number of unemployed does not properly measure countrywide unemployment. Its rapid rise in recent years shows, however, a tendency towards a more active search for formal jobs, with a reduced reliance on underemployment in service sectors.

The Labor Placement Office data, and household labor force surveys (for urban places) held in mid-1980s throw additional light on the age, sex and educational characteristics of urban labor (SIS,1988). These complementary data clearly bring out the predominance of youth unemployment in Turkey. Although the number of unemployed males exceed by a wide margin the number of unemployed females, the unemployment rate for women is much higher than that for men. Moreover, the small share of unemployed with formal vocational training in total registered unemployment points to the existence of a large scope for expanding appropriate tecnical school systems at the intermediate level.

A further point of interest in the labor market relates to social security coverage in the labor market. For the year 1988, Table 3 shows that 7.2 million out of 16.9 million employed persons are covered by social security in 1988, of which 0.7 million is agricultural, and 6.5 million nonagricultural labor. The latter nonagricultural figure includes 1.9 million self-employed persons (covered by Bag-kur), and 4.6 million actively insured wage labor. The expansion of the social security coverage of the agricultural sector

remains a challenging financial task in a setting where premium collections from existing members are grossly behind accruals.

Formal Planning and De Facto Policies for Labor

The formal analytical frameworks of Turkey's five-year development plans are nonoptimizing versions of fixed-price input-output models. These models seek to ensure internal consistency between macro targets, sectoral demands and outputs. Employment projections are obtained essentially as by-products of the input-output exercise. They are based on sectoral output estimates, and exogenously fixed labor-output coefficients. These models do not search for sectoral comparative advantage, and optimal labor-capital allocation in the development process.

At the project level of planning, the formal interest in the choice of appropriate technologies has not been strong in the private as well as public sectors. In fact, the prevalent mixture of financial incentives impart a capital-intensive bias in investment choices endorsed by the government.

Because of their fixed-price nature, Turkey's official planning models also sidestep wage-policy aspects in employment projections. Thus, in a formal sense, the policy-makers are not confronted with the issue of functional income distribution in the design of structural adjustment and growth policies. The shorter-term macro-stabilization programs, including those supported by the IMF, have also steered clear from setting quantitative guidelines for incomes and wage policies, except for a short-lived attempt to evolve a social contract in 1978 under Ecevit administration.

Prior to 1980, the organized labor enjoyed, under the progressive arrangements of the 1961 constitution, a liberal institutional framework for wage settlements, making a full use the collective bargaining process and the right to strike. The number of workers covered by collective bargaining agreements (in thousands) increased from 9.5 in 1963 to 590 in 1977.[7]

With the rising influence of labor movement, the union militancy was heightened from 1977 to 1980 in conjunction with the contractionary and inflatioary impact of the foreign exchange crisis faced in this period. On the eve of the 1980s, employers'associations had adopted a common anti-union stand in their approach to industrial relations.

The military rule of 1980-83 ended strikes, banned union activity, and transitionally entrusted the wage settlement process to the government-controlled High Arbitration Board. The 1982 constitution introduced restrictive general guidelines for union activity. With the adoption of two separate new laws (2821 and 2822) in 1983 on labor unions , and collective bargaining, strikes and lock- outs, the legislative framework was rigidly tightened. As before 1980, government employees (civil servants) are barred from unionization in the new labor environment. The post-1983 collective agreements (of two year duration) have, thus far, not featured full indexation mechanisms to protect real wages against inflation.

In retrospect, it may be observed that macroeconomic as well as institutional conditions affected real wage movements. In the similar vein, trade and exchange-rate policies together with public finance conditions shaped price-support and subsidy policies for agriculture.

Policy Phases, 1973-88

Despite the severity of the external shocks of the mid-1970s, Turkey pursued from 1973 to 1977 a strongly inward-oriented growth process financed by a massive external borrowing. During this period, reserve decumulation and large-scale external financing allowed an overvalued exchange rate, a notable rise in real wages, and favorable support prices and input subsidies for farmers.

After the collapse of the balance of payments in mid-1977, the stabilization attempts of the 1978-79 episode (under Ecevit administration) proved to be inadequate to halt a highly inflationary contraction of output.

Domestic terms of trade for agriculture ,and urban real wages began to fall sharply in 1979.

From 1980 to 1983, the military regime rigorously implemented the export-based recovery program introduced in early 1980 by Demirel's civilian government. As analyzed in detail elsewhere by Celasun and Rodrik (1990), the 1980-83 episode featured sharp changes in the relative price system to accomodate the import liberalization, export promotion, and resource mobilization components of the adjustment process. Real wage reductions, and restrictive price-support and subsidy policies for agriculture were the counterpart of substantial real rise in exchange rate (TL/$), interest rate, and industrial product prices.

Under the revised parliamentary arrangements, the post-1983 Ozal administrations proceeded with further trade and financial liberalization, and maintained the anti-labor stance in the relative price system. By taking advantage of the drop in imported oil prices in 1986, the authorities accelerated output and employment growth in 1986- 87, properly serviced foreign debt, but could not prevent a large rise in fiscal deficits, which eventually caused a sharp increase in inflation in 1988, further eroding real wages and farmers' earnings. After a massive setback in countrywide local elections held in March, 1989, which featured income distribution as a major issue, the restructured Ozal cabinet allowed large upward adjustments in nominal wages and salaries in the public sector, by implementing deep cuts in public investment to avoid larger fiscal deficits.

3. INDICATORS OF DISTRIBUTIONAL SHIFTS OVER TIME

Rather than focusing on the detailed structure of income distribution at a given point in time, this section attempts to review various sets of available indicators which bring out the nature and direction of distributional shifts in Turkey's recent adjustment experience.

Intersectoral Productivity Differentials

As noted in Section 2, the wide income gap between rural and urban

Table 4: Intersectoral Productivity Differentials, 1978-88

	Constant 1973 prices			Current prices		
	1978	1983	1988	1978	1983	1988
1.Agriculture	1.0	1.0	1.0	1.0	1.0	1.0
2.Nonagriculture						
a.Mining and energy	7.3	4.7	4.2	6.0	10.2	12.0
b.Manufacturing	3.9	4.4	4.2	4.6	7.1	7.3
c.Construction	3.5	3.3	2.8	3.6	3.5	3.1
d.Trade	7.7	7.9	6.9	8.1	12.9	10.5
e.Public services	3.9	3.9	3.2	3.9	3.3	2.1
f.Other services	5.0	4.3	3.7	5.0	6.3	5.7
g.Subtotal(a to f)	4.7	4.6	4.1	4.9	6.5	6.0
Addenda :						
SPO revised data base[b]						
Agriculture	1.0	1.0	1.0	1.0	1.0	1.0
Nonagriculture	3.5	3.4	3.4	3.7	4.9	5.0

Source : Celasun (1986b) for 1978 and 1983, and SPO 1989 Annual rogram for 1988 estimates.

Notes: a/ Productivity differentials are measured by the ratios of per worker value added in nonagricultural sectors to per worker value added in agriculture.
b/ Productivity differentials are restimated on the basis of revised labor data in SPO(1989, Table 347).

households is a major source of income inequality in Turkey, where the predominant (but not the entire) source of rural incomes is agricultural value added. Thus, the ratio of per worker value added in nonagriculture to that in agriculture is a useful indicator to gauge changes in the relative income position of rural population. This productivity differential may also be determined, in a similar way, for each major sector in the nonagricultural part of the economy.

Table 4 shows intersectoral productivity differentials for the benchmark years 1978,1983 and 1988, which are derived from the Fifth Plan series for labor and value added. These differentials are computed in two sets, using constant price and current price data for value added.

The observed value of the productivity differential for nonagriculture-agriculture was 5.1 in 1973 (Celasun, 1986b). In constant 1973 prices, this ratio dropped to 4.7 in 1978, and further to 4.1 in 1988. The implication is that, if relative prices were to remain constant, the relative income position of the rural sector would have improved under the actual real growth and employment performance recorded in the economy.

However, under current price terms, the latter ratio jumps from 4.9 in 1978 to 6.5 in 1983, revealing the large magnitude of adverse price shock on the income of agricultural population.

A more disaggregated comparison of constant-price and current- price productivity differentials shows that mining and energy, manufacturing, and trade sectors benefited from intersectoral income shifts caused by relative price changes. In turn, public services and construction were the large loosers.

The trade sector, covering wholesale and retail commerce, appears to be a major beneficiary of relative price changes in the post-1978 period. Business firms and merchants in the trade sector benefited from high inflation, large trade margins on non-food manufactures, and generous government incentives for export-trade activities. Although the ratio of trade-sector employment to agricultural employment was about 10 percent, the shares of these two sectors in total value added (GDP) became nearly equal in 1988.

The price-induced income transfers to mining and energy, and manufacturing boosted the revenue-raising capacities of state enterprises in these sectors, and hence contributed favorably to resource mobilization in the public sector. In turn, the large income shift towards the trade sector could not be channeled effectively to new investments in productive sectors such as manufacturing, which served as the principal source for export expansion in the post-1980 period. The share of manufacturing in total fixed

investment dropped from 29 percent in 1977-78 to 23 percent in 1983, and further to 15 percent in 1988.

Finally, Table 4 also gives, as addenda, nonagriculture- agriculture productivity differentials computed on te basis of Sixth Plan labor series, which appear as noted in Section 2, to underestimate agricultural labor. Under these revised labor series, the latter productivity differential also increases rapidly from 1978 to 1988, when value added data are treated in nominal terms.

Real Wages and Factor Shares

The next set of distributional indicators are real wages and factor shares. Table 5 shows real wage movements from 1973 to 1988, distinguish-

Table 5: Real Wages, 1973-88 (1978=100)

	Product wage [a]	Consumption wage [b]	Gov't employee gross salary [c]
1973-75	57.0	73.9	96.2
1976-77	75.2	93.7	108.5
1978	100.0	100.0	100.0
1979	75.1	85.6	99.1
1980	61.0	61.9	73.8
1981	59.5	65.9	63.7
1982	60.6	64.6	67.7
1983	56.0	64.5	63.6
1984	51.3	61.0	50.7
1985	43.8	53.8	46.5
1986	40.6	64.3	49.3
1987 [d]	40.2	69.9	52.9
1988 [d]	32.7	55.6	49.6

Source : SPO(1988), and national accounts data.

Notes : a/ Economywide average gross wage (Turkiye ucretlilerinin genel ucret maliyeti), deflated by GNP deflator.
b/ Economywide average after-tax net wage (including tax rebates), deflated by private consumption deflator.
c/ The ratio of deflator for public services to GNP deflator.
d/ Preliminary estimates by the author.

ing product wage (gross labor cost, deflated by GNP deflator) from consumption wage (after-tax net wage, deflated by private consumption deflator). Both wage series are weighted averages for wage labor, the overwhelming portion of which is in nonagricultural sectors.

A comparison of these two wage series bring out the changing fiscal burden on wages. From 1973 to 1978, product wage increased much faster than consumption wage, mainly because of unadjusted income-tax schedules in this period, which saw a moderately high and steady inflation. In the post-1980 period, product wage declined more rapidly than consumption wage, especially from 1983 onwards, reflecting mainly reduced tax rates and social benefits (including employers' social security premiums). After 1985, consumption wage benefited mildly from the newly introduced scheme of tax rebates on workers' expenditures.

Table 5 presents also a proxy index for average real gross salary of government employees. The fall in this index (from 100 in 1978 to 50 in 1988) contributed to additional saving mobilization in the public sector.

Under revised income tax schedules, the share of wage labor in total income tax revenue (of the central government) declined from 65 percent in mid-1970s to about 45 percent in 1987. This should not be interpreted, however, as improved tax equity in the country mainly for three reasons. First, the share of wage labor in GDP dropped sharply in the post-1978 period. Second, the government reduced income-tax burden on profit income to promote financial savings and various supply-side measures, leading to a large reduction in income tax/GNP ratio after 1981. Third, a heavy reliance on indirect tax increases (including extra-budgetary fund levies) had an adverse impact on the purchasing power of lower income groups. Available evidence suggests that the overall tax equity was reduced in the 1980s (Celasun, 1990).

The available data on factor shares are shown in Table 6. These

Table 6: Functional Distribution of Income, 1973–88 (percent) [a]

	Agriculture	Nonagriculture	
		Wage Income	Other Income
1973-75	30.0	30.9	39.1
1976-77	30.2	34.8	35.0
1978	26.7	35.2	38.1
1979	24.3	32.8	42.9
1980	23.9	26.7	49.4
1981	23.1	24.6	52.3
1982	21.8	24.6	53.6
1983	20.5	24.8	54.7
1984	20.4	21.6	58.0
1985	19.1	18.8	62.1
1986	18.1	17.7	64.2
1987 [b]	17.6	17.0	65.4
1988 [b]	15.8	14.0 [c]	70.2

Source : Ozmucur (1987 and 1988)

Notes : a/ Total income concept refers to domestic factor income, net of depreciation. Within-sector factor shares for agriculture are not available. Besides rents, profits and interest payments, nonagricultural "other income" includes earnings of self employed persons. The "wage income" measures gross wages of actively insured wage labor, whose number is around 4.6 million workers in 1988.
b/ Preliminary estimates by Ozmucur (1988).
c/ A variant estimate by Ozotun (1988a) is 16.1 percent.

figures indicate that the share of nonagricultural wage labor (covering insured workers and government employees) in domestic factor income (excluding depreciation)dropped from 35 percent in 1976-78 to 17.5 percent in 1986-87. Such a large fall in wage share reflects the limited employment response to reduction in real wages. The implication is that there is a highly restricted scope for capital-labor substitution in existing productive capacities as explored by Celasun (1986a).

In turn, the rise in the share of nonagricultural nonwage income in total domestic factor income from 40 percent in late 1970s to 65 percent in 1986-88 is an unusually large distributional shift towards income from capi-

Table 7: Factor Shares in Top 500 Industrial Firms, 1983-87

	1983	1984	1985	1986	1987
A.Overall Averages(%)					
Wages	55.5	46.4	40.4	37.9	34.4
Interest payments	28.9	22.2	24.6	37.9	38.2
Rents	0.4	0.4	0.5	0.5	0.4
Profits	15.2	31.0	34.5	23.7	27.0
Net value added	100.0	100.0	100.0	100.0	100.0
Net value added	69.2	82.5	88.8	69.9	73.4
Depreciation	12.8	16.5	17.5	16.8	18.7
Indirect taxes	15.3	8.1	11.9	18.5	15.6
Subdsidies	-17.3	-7.1	-18.2	-5.2	-7.7
Gross value added	100.0	100.0	100.0	100.0	100.0
B.Private/Public Wage share in net v. added(%)					
Private	42.7	38.2	39.4	32.6	29.5
Public	74.9	57.4	41.3	44.3	40.5

Source : Ozotun (1988a)

tal. In this context, it should be noted that the latter share does not represent pure private profit income, as it includes earnings of self-employed, and government's income from property (covering mainly the profits of state enterprises).[8] Fiscal data provided by Celasun (1990) show that the share of government's factor income in GNP increased to 6 percent in 1987 from -0.7 percent in 1979.

Table 7 gives a more detailed breakdown of factor shares in Turkey's largest 500 indusrial firms from 1983 to 1987. Three major points emerge from the data given in Table 7. First, the notable rise in the share of interest payments from 1984 onwards was offset mainly by reduction in wage shares.

Second, the drop in wage share was larger in public firms (state enterprises) than in private firms. Third, by increasing net indirect taxes in 1986-87 , the government captured a larger share of operating surplus in this subperiod in its all-out resource mobilization drive to finance the rise in external debt servicing.

Regional Dimension of Income Distribution

Region-specific income data given in Table 8 shows that Turkey's post-1980 economic adjusment produced larger regional imbalances in income distribution. The highly industrial and commercial Marmara and Agean region benefited most from the relatively more rapid growth of industry and trade sectors, particularly in 1983-86. Per capita income growth in Black Sea and Eastern Anatolia regions, where agriculture is relatively more important, was negative from 1979 to 1983. Real income growth was also slow in Mediterrenean, because of the weak income position of agriculture, and rapid growth of urban population.

The low income levels of Black Sea and Eastern Anatolia also explain, to a considerable extent, the continuing out-migration from these two regions. In this context, it should be noted that the government's top-priority emphasis on energy and water-resource development projects of South Eastern Anatolia is a worthy step towards the long-term amelioration of regional imbalances in Turkey.

Size Distribution and Poverty Measures

As pointed out at the outset of the paper, household surveys do not normally yield a reliable and correct picture of size distribution in semi-industrial countries such as Turkey, where tax evasion is widespread, and self-employed and unpaid forms of labor are predominant. With this caveat in mind, the inequality measures available for the 1973-87 period are summarized in Table 9.

The results of the household surveys conducted in 1973, 1986 and 1987 cluster around a similar set of figures : the top 20 percent of households

Table 8: Interregional Comparison of Per Capita Real GDP[a]

	1979	1983	1986
A. Regional Parities			
Marmara and Agean	100	100	100
Mediterranean	69	70	61
Central Anatolia	54	53	52
Black Sea	56	51	47
Eastern Anatolia	34	32	29
B. Growth Index of Per Capita GDP (1978=100)			
Marmara and Agean	100	105	123
Mediterranean	100	107	109
Central Anatolia	100	105	119
Black Sea	100	95	103
Eastern Anatolia	100	97	104

Source : Özötün (1988b)

Note : a/ Indices are computed from per capita GDP data measured in constant 1979 prices.

receives about 55 percent of disposable income, while the share of bottom 40 percent remains around 11 percent. This picture compares unfavorably with the inequality measures of other South European countries (with the exception of Portugal), where the share of top 20 percent is around 40 percent of total household income.

Model-based estimates of the present author indicate a mild improvement in size distribution from 1973 to 1978, and a considerable worsening during 1978-83. As already discussed in Section 2, the distributional improvement from 1973 to 1978 was attained in an economic environment characterized by massive trade deficits and unsustainable foreign borrowing in 1974-77.

Table 9: Size Distribution and Poverty Measures

	Income share (%)			
	Top 20 percent	Bottom 40 percent	Gini coefficient	Percent of poor [g]
A.Turkey				
1973 [a]	56.5	11.5	0.51	..
1973 [b]	55.3	11.4	0.50	38.4
1973 [c]	55.2	9.9	0.5146	32.0
1978 [c]	54.7	10.2	0.5089	25.0
1983 [c]	55.9	9.6	0.5224	29.9
1986 [d]	55.9	12.3	0.50	..
1987 [e]	55.0	11.0	..	..
B.Southern Europe [f]				
Portugal(1973-74)	49.1	15.2		
Spain(1980-81)	40.0	19.4		
France(1975)	42.2	17.0		
Italy(1977)	43.9	17.5		
Yugoslavia(1978)	38.7	18.7		

Notes : a/ SPO(1976), survey data
b/ Dervis and Robinson (1980), survey data
c/ Celasun (1986b), derived estimates
d/ TUSIAD (1986), survey data
e/ SIS (1989), survey data, preliminary results
f/ World Bank (1988)
g/ The ratio of poor households to total (number of) households .Poor household receives less than 12,000 TL (about $ 835) in constant 1973 prices.

In Turkey, policy studies and political discussions often ignore the major problem of absolute poverty. The various issues connected with meeting the basic needs of population below a specified level of income are not explored adequately. Taking the poverty analysis of Dervis and Robinson (1980) for the benchmark year 1973 as a point of departure, this author estimates that the share of poor households in total population decreased (in percent) to 25 in 1978 from 32 in 1973, but increased to 30 in 1983. About 75 to 80 percent of poor households reside in rural settlements (with less than 10,000 population). In these estimates, the poverty line was taken at $

835, for an average household of 5.5 persons, in constant 1973 prices and exchange rates (Celasun, 1986b).

Interest Earnings : A Digression

In discussing the post-1980 distributional shift towards income from capital, the pro-government circles often assert that financial liberalization effectively transformed the sharply increased interest payments of firms to interest earnings, which are quite evenly distributed among households.

Lacking a comprehensive study on the distribution of returns to financial assets, we draw on the partial analysis of Boratav (1990) of this issue. Boratav estimates that the share of interests paid on time and foreign exchange deposits in GNP soared from 0.7 percent in 1979 to 10 percent in 1986. Boratav also observes that " time deposit accounts of less than 3 million TL (roughly $ 4,000 in 1986 rates) comprise 94.3 percent of all (8 million) accounts, but incorporate only 45 percent of the total value of time deposits." Then, 460 thousand accounts (5.7 percent of the total) account for 55 percent of all deposits in value terms.

Taking into account the fact that large deposit holders tend to spread their funds among different banks, Boratav concludes that " economically significant rentier group probably consists of no more than a few hundred thousands people." Together with large financial establishments, the latter rentier group is likely to be the major beneficiary of returns to other financial assets such as government securities (bonds, bills and revenue-sharing certificates), the issue of which increased (in percent of GNP) from 0.9 in 1982 to 8.3 in 1986 (Celasun and Rodrik, 1990, Table 8.5).

Our final observation on the Turkish income distribution data relates to the latest available household survey by the SIS(1989), the inequality measures of which are shown in Table 9. The preliminary results of this official survey (for the year 1987) give the following breakdown for the sources of total (after-tax) household income:

	1987
Agricultural inc ome	21.3
Wages	23.4
Earnings from financial assets	1.7
Other income	53.6
Total	100.0

In the context of our discussion of interest earnings and structure of time deposits, it is evident that the latest SIS survey grossly underestimates earnings from financial assets as a source of household income, and largely misses out rentier incomes. A more proper reporting of rentier incomes would have yielded less favorable inequality measures, perhaps resembling more closely those inequality estimates derived by this author for the benchmark year 1983 (see Table 9).

4. POLICY LESSONS AND IMPLICATIONS

After reviewing the major structural and policy factors that shape the employment and income distribution situation in Turkey, the present paper has examined the nature and time pattern of distributional indicators, by often extending the data base back to 1973, where feasible. The available evidence shows that Turkish income distribution improved to some extent in the mid-1970s under Turkey's massive external borrowing and lax economic policies in this period.

The unsustainable nature of heavy borrowing from abroad eventually produced a deep crisis (from 1977-78 on), which required a sizable domestic effort for internal adjustment. The initial blow to income disribution was delivered by the inflationary episode of 1979-80 under an unexpectedly large import compression, which was accentuated by the oil-price shock in late 1979.

The policy-makers of the post-1980 export-oriented adjustment enjoyed a virtually politics-free economic environment under the military

regime of the 1980-83 period. Price corrections became a top priority item in the policy agenda. For export promotion, import liberalization, and deregulation of financial and product markets, large upward adjustments were made in the prices of domestic capital, foreign exchange, and energy and industrial products. Within the framework of general-equilibrium price system, to validate these upward price adjustments in real terms, the real prices of urban labor and farm products were forced to fall through various mechanisms, including a restructured system of industrial relations.

The policy trends of 1980-83 continued, albeit in milder forms , in the post-1983 Ozal period, which saw a huge rise in external debt servicing. In response to wage reduction, the rise in employment was insufficient to halt the drop in labor's share in domestic factor income.

What lessons can be drawn from the Turkish adjustment experience, which ended up with improved export performance, and worsened income distribution? The present author suggests three major economic policy lessons for middle-income countries.

First, heavy foreign borrowing carries the risk of generating additional policy and price distortions in the economy. Under heavy borrowing, political temptations for a lax fiscal policy, overvalued exchange rate, low interest rates are likely to be overwhelming. A sudden ending of capital inflows would then require a sizable domestic adjustment with an unexpectedly sharp political and social dislocations. Symmetrically, a large rise in external debt servicing requires a restrictive stance on real wages and social spending, giving rise to destabilizing trends in the political structure. A smooth and realistic medium-term planning of capital borrowing and servicing would be in the best interests of borrowers as well as lenders.

Second, a credible process of fiscal reform should be an integral component of stabilization and structural adjustment effort. In a habitual way, Turkey's policy makers relied heavily on wage cuts, state-enterprise price

hikes, and indirect taxes to mobilize resources for the public sector, rather than evolving an efficient and equitable system of income taxation. A strong reliance on price measures for resource mobilization gives rise to inner conflicts in conducting anti- inflation and liberalization policies, and tends to aggravate the distributional question.

Third, severe reduction in domestic absorption should be treated as a temporary aspect of export promotion. Export drive needs to be converted into a sustainable process by reallocating capital efficiently to balance of payments improving industries so that the burden of adjusment is not placed entirely on real wages in lowering domestic absorption, and gaining competitiveness in international markets.

We conclude by stating that these lessons should be born in mind in designing and implementing Turkey's medium-term economic policies in the 1990s. In a multi-party political system, the overall distributional question may be addressed more effectively in a stable and sustainable growth environment.

NOTES

[1] See World Bank (1988.Table 1.6).

[2] See the counterfactual simulations for the Turkish economy (1978-83) with the model SIMLOG-1 in Celasun (1986a).

[3] See Celasun (1986a) for an estimated social accounting matrix for the benchmark year 1978.

[4] For a wider discussion of these points, see Dervis and Robinson (1980) and Celasun (1986b).

[5] From 1963 to 1973, the employment increase in Turkish manufacturing was less than the rise in Turkey's labor stock in Western Europe (Celasun, 1983, Table 4.1).

[6] It is instructive to note that wage imputations become unavoidable in specifying the parameters of production functions for sectors employing nonwage labor in model-based general equilibrium assessments of the Turkish economy (Celasun, 1986a).

[7] These figures and some of the following observations on labor relations draw on Senses (1989).

[8] Earnings of self-employed persons include compensation for their labor input as well as returns to the capital stock used by them.

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ÖZET

TÜRKİYE'DE 1980 SONRASI UYUM SÜRECİNİN GELİR DAĞILIMI ve İSTİHDAM YÖNLERİ

1973-78 döneminde gerçekleşen sınırlı iyileşmeden sonra, 1978-88 döneminde gelir dağılımında gözlenen değişmelerin niteliği ve yönleri bu çalışmada irdelenmektedir. Ayrıca, işgücü piyasasının yönlendirilmesi için izlenen formel planlama ve fiili politika süreçlerinin başlıca özellikleri gözden geçirilmektedir. 1980 sonrası gelir dağılımı değişiklikleri değerlendirilirken, iç talebin kısıtlanması, ihracatın geliştirilmesi ve yurtiçi tasarrufların arttırılması çabalarında, göreli fiyat değişmelerine ağırlık veren politikalar yorumlanmaktadır. Dış borçlanmanın çoğaldığı ve azaldığı dönemlerde, gelir dağılımı göstergelerinde gözlenen değişmeler genel hatlar itibariyle tartışılmaktadır.