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# DEVELOPMENT POLICY AND INDUSTRIALIZATION IN TURKEY

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**In the post-World War II years, Turkey pursued inward-oriented growth policies until the oil shock of 1973-74, when it deferred internal adjustment and became a major borrower. Turkey's debt crisis hit in 1977. After 1980, it introduced a comprehensive set of measures for stabilization. Turkey's relatively successful switch warrants careful study. However, a shift to public investments in social overhead, leads the author to conclude there will be a slow-down in manufacturing-led export growth in the 1990s.**

## Introduction

Prior to the introduction of liberalization reforms in 1980, Turkey had pursued inward-oriented growth policies in the post-World War II period. Turkey's participation in international and regional trade had been low by comparison to other countries. Nonetheless, these growth policies generated a rapid transformation of the productive capabilities, resulting in a considerable rise in the share of manufacturing in domestic output. In turn, the relative size and role of agriculture gradually declined. In the aftermath of the first oil shock of 1973-74, Turkey, as an oil-importing middle-income country, chose to defer internal

adjustment, and became a major borrower in the international financial market.

However, Turkey's debt crisis arrived early in 1977. It produced a severe balance of payments problem coupled with hyper-inflation which led to a contraction of output. In response to the crisis, which was exacerbated by the second oil shock of 1979, Turkey introduced a comprehensive set of policy measures for stabilization-cum-liberalization in 1980 and thereafter. By the time other major LDC debtors outside the East Asia region were entering their debt negotiations in 1982, the Turkish economy was steadily showing signs of financial stabilization and export-led recovery.

In stark contrast with the disappointing economic performance of the heavily indebted countries in the post-1982 period, Turkey's relatively

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successful switch from inward to outward-oriented policies warrants careful study to clarify the nature of underlying factors and conditions. The variations in the observed economic performance since 1973 may be attributed to the interplay and combined effects of external factors, long-term structural trends, policies and modalities of debt management. A systematic decomposition of the policy and non-policy effects behind Turkey's debt crisis and subsequent adjustment episodes is therefore a challenging analytical task.<sup>1</sup>

Notwithstanding the complexity of policy and performance links, the fact that Turkey's post-1980 export-led recovery was largely based on industrial capacities built in the earlier periods clearly demonstrates the medium-term feasibility of a switch from inward-to outward-oriented expansion without a massive restructuring in factor allocation.

Industrialization is the subject of Section 3, which reexamines the role of exports and import substitution policies as engines of growth in the manufacturing sector.

The broad implications emerging from Turkey's industrialization experience are summarized in Section 4.

### **Development Policy Phases**

To provide a clear perspective of the process of industrialization, this section outlines the development phases in Turkey's recent economic history. A particular emphasis will be put on major policy elements that have had a bearing on long-term structural trends in the growth process.<sup>2</sup>

#### **A: Initial Conditions Prior to 1950:**

Following the establishment of the republic in 1923, Turkey became preoccupied with political consolidation, social reforms and renegotiation of the Ottoman debt in the remainder of the 1920s. The 1930s saw innovative institution-building for economic growth, leading to the formation of state economic enterprises (SEEs), through which key entrepreneurial functions could be carried by the government in implementing industrial programs. With the establishment of the SEEs, a particular form of a mixed-economy system began to evolve in Turkey, which contributed favorably to import-substituting growth in the post-depression period. In the mid-1930s, the Turkish industrial drive marked the first-stage of import substitution, which centered on domestic production of non-durable consumer goods. From 1923 to 1938, the GNP growth averaged around 7.4 percent per year.

Despite its neutral foreign policy stance, Turkey could not escape the adverse economic impact of World War II. The average annual GNP growth sharply declined to 1.2 percent in 1938-48. After the major devaluation of 1946, the government policies and orientation shifted toward free enterprise and primary sector production. These policy shifts were instituted partly in response to the conditions of the U.S. bilateral assistance programs and the Marshall Aid Plan, which stressed industrialization in Western Europe and primary exports in the peripheral countries. In the late 1940s, the government also initiated a change toward a multi-party parliamentary system in the political life of the country.

**B: 1950-1963:**

The policy changes introduced in the postwar years deemphasized planning and industrial development. Nonetheless, the Turkish economy expanded rapidly at an annual average rate of 7.9 percent from 1948 to 1958. This rapid growth benefited from external financial assistance, expansion of primary exports, and a steep rise in imports. At the sector level, agriculture was an engine of growth in the early 1950s, receiving a boost from favorable weather conditions, expansion of arable land, and the world commodity boom connected with the Korean War. The agriculture sector experienced, however, a massive crop failure in 1954. In the absence of a viable adjustment policy, the Turkish economy entered in 1954-55 a phase of foreign exchange bottleneck, high inflation, and a lower GNP growth rate which fell to around 4.0 percent per year during 1953-58. With the export/GDP ratio declining from 7.5 percent in 1948-53 to 3.9 percent in 1953-58, the import/GDP ratio also fell to 5.4 percent in 1953-58 from 9.6 percent in 1948-53.

The mid-1950s marked the reemergence of import-substitution policies in the Turkish scene. The balance of payments involving ad hoc mixtures of non-price measures induced sporadic import-substitution projects in manufacturing, but could not prevent the rapid build up of short-term debt and trade arrears, which culminated in a deep payments crisis in 1956-58. The latter crisis was eventually resolved by an IMF-sponsored devaluation-cum-stabilization program reluctantly introduced in mid-1958. This program was supported by debt consolidation and sizable new lending. While it was effective in restoring price stability, the program did not result in an upsurge of exports. In the face of internal political difficulties, the military intervened, on a transitional basis, in May, 1960, introducing a socially progressive constitution in 1961. Under the new institutional requirement, the annual GNP growth averaged around 5.0 percent in 1958-63, during which the observed import/GDP and export/GDP ratios were 7.2 and 4.6 percent, respectively.

**C: 1963-1973**

In contrast with the volatile development performance in 1953-63, the decade of 1963-73 saw a greater emphasis on domestic resource mobiliza-

tion, coordinated investment planning and more balanced multi-sectoral growth. The annual GNP growth in 1963-73 averaged around 6.7 percent as compared with 4.8 percent in 1953-63. The average share of fixed investment in GNP increased from 14 percent in 1953-62 to about 17 percent in 1963-72. Turkey's reliance on foreign resources were quite low by cross-country standards. The observed ratios of current account deficit to GNP averaged around 1.8 and 0.6 percent, respectively, under the First (1963-67) and Second (1968-72) plans. The public sector was assigned a leading role in the development programs for industry as well as infrastructure with its share in total investment exceeding 50 percent in 1963-72.

The economy wide planning did not significantly alter, however, the restrictive content of trade policies, which discriminated against both exports and imports in manufacturing. The annual import programs became elaborate policy tools to contain imports and to provide strong non-price protection to domestic industries. With the erosion of real exchange rate, the scope for market forces became increasingly narrow. The economies of scale could not always be exploited fully for public investments, which served a variety of social purposes such as regional development. The end of the 1960s saw, once again, rising difficulties in the balance of payments, despite more interest in export promotion. To avert the emergence of a full scale payments crisis, an IMF-supported stabilization program was introduced in 1970, involving a large devaluation. In 1970, a frame agreement (called Additional Protocol) was signed with the EEC for the transitional stage of establishing a customs union before the full membership stage.

Due to rising political unrest, the parliamentary system was strained, and the military became partially involved in the formation of cabinets in 1971-72. The Turkish economy experienced a boom in export earnings and worker's remittances in 1972-73. In the early 1970s the factors contributing to the foreign exchange boom were mainly the new incentives induced by the 1970 devaluation and expansionary cyclical conditions in the world economy.

**D: 1973-1979**

The unprecedented rise in foreign exchange reserves in 1972-73 led to the belief that the external gap was no longer a binding constraint on growth. Thus, the Third plan (1973-77) targeted an intensified industrialization effort in capital-intensive sub-sectors. After the 1973 oil crisis, the policy-makers attempted to preserve the momentum of inward-oriented growth through a rapid reserve dissimulation, and heavy short-term borrowing. The availability of external credits at negative real interest rates had made the deferment of structural adjustment a politically attractive policy option.

From 1973 to 1977, the Turkish economy expanded at about 6.5 percent per year. The rapid rise in external borrowing permitted the investment/GNP ratio to increase from 18 percent in 1973 to early 1974, and deteriorated sharply to a deficit of 8 percent of GNP in 1977 in conjunction with the reduction in the marginal savings ratio to 12 percent in 1973-77 from 26 percent in 1968-72.

Despite the need to realign incentives to cope with the external shocks, large price distortions were allowed to build up in the Turkish economy from 1973 to 1977.<sup>3</sup> Consequently, SEE deficits were widened, export market shares declined, workers' remittances fell, and demand for imports at subsidized prices reached unsustainable levels.<sup>4</sup> With the collapse of creditors' confidence and bank lending, Turkey entered another period of foreign exchange crisis in 1978-79.

**E: Post-1980 Policy Reforms**

The sharp downswing and deep foreign exchange crisis of the 1978-79 sub-period provided instructive lessons for the Turkish public opinion and government policy-makers. First, it became evident that the external shocks of the 1970s were of a permanent rather than transitory nature. Second, it was realized that the scope for growth through import compression was limited at Turkey's current stage of industrialization. Third, a working consensus emerged as regards the need to combine stabilization measures with strong export incentives in a market-economy framework. Against the backdrop of these factors, a comprehensive package of stabilization-cum-liberalization measures was introduced in January 1980.

Turkey's new policy stance received strong financial support from official creditors and multilateral agencies. The economy gained an acceptable degree of macro-economic stability in 1981-83 and merchandise exports increased to \$8.3 billion in 1985 from \$2.9 billion in 1980. The export-led GNP growth averaged around 5.5 percent per year in the 1981-86 period.

For demand management and export promotion, the post-1980 policy actions relied heavily on exchange rate depreciation, a switch to positive real interest rates, and hikes in SEE prices. An integral component of the change in relative price system was lower real prices for farmers, urban labor and government employees, leading to a considerable deterioration of distribution and higher social costs in the post-1979 adjustment episodes.<sup>5</sup> Despite the GNP recovery, the private business investments were at low levels in the 1980s. With public investments shifted from manufacturing to social overhead and services, the lower levels of private investment pointed to the possibility of a slowdown in manufacturing-led export growth in the early 1990s.

Table 1 of Annex assembles basic data for the Turkish economy for the year 1986, and in a selected way for the earlier periods. In this table (panel C), the rapid rise in the share of manufacturing in total merchandise exports is particularly notable during the 1980-85 period. The role of exports in manufacturing growth is discussed in the next section.

### **Process of Industrialization**

Against the background of Turkey's development policy phases identified over the 1950-85 period, we may now take a closer look at the process of industrialization, which is commonly measured by the rise in the share of manufacturing in domestic output and factor use. In the present section, we review and broadly interpret empirical data on (1) the long-term transformation of sectoral structure, and (2) sources of manufacturing growth over time. In our presentation, the focus is on sequencing aspects of long-term structural trends and industrial strategy in the Turkish economy.<sup>6</sup>



**A: Transformation of Sectoral Structure**

Table 2 of the Annex shows data on the evolution of the sectoral distribution of GDP and factor allocation from 1953 onwards. The available data are aggregated into primary (agriculture and mining), manufacturing, social overhead (electricity, construction and transportation) and services sectors. In the Turkish setting, the primary sector consists predominantly of agriculture, as the share of mining in GDP remained around 1.5 percent in the entire postwar period. The key characteristics of the observed transformation process are the following:

(i) The change in the productive structure was quite slow in the decade of 1953-63 when Turkey faced frequent stop-go cycles. In turn, under formal development planning, the economy experienced a more rapid transformation during 1963-73. The latter decade saw a rapid decline in the share of primary sector in GDP, which was offset by the rise in the shares of manufacturing and social overhead sectors. At the four-sector level of aggregation, the structural change in production was not pronounced in the 1973-83 period.

(ii) In the overall transformation process, the sectoral restructuring of employment lagged behind the shifts in output. Despite the substantially reduced share of primary sector in GDP, the relative proportion of primary labor in total employment to the limiting employment-generating capacity of Turkey's generate adequate levels of industrial employment has been partly compensated by the outflow of Turkish workers to Western Europe especially in the late 1960s and early 1970s.

(iii) The data in Table 2 on the distribution of fixed investment sheds additional light on patterns of factor allocation in Turkey. In combination with employment indicators, the fixed investment data point to the rising capital intensity of growth in manufacturing. This trend reflects the shift toward heavy industries, and anti-labor bias induced by factor prices in the choice of technologies.

(iv) Table 2 also presents figures for the ratio of agricultural and food imports to agricultural output at the bench mark years. These estimates show that Turkey's dependence on imports has been unusually low in balancing supply and demand for agricultural and food products. Thus, agricultural self-sufficiency (at the aggregate level) has served as a support-

ive factor for the inward-oriented industrial strategy pursued prior to 1980. In fact, as another claim on Turkey's limited export earnings, a switch to outward-orientation became the only viable option in the growth process after the collapse of an over borrowing cycle in 1977.

### **B: Sources of Manufacturing Growth:**

The examination of data in Table 2 brings out the rising share of manufacturing in total output as one of the key features of structural transition associated with the aggregate growth observed in the post-1953 period. A sources of growth analysis for manufacturing provides additional information on the time pattern of causal factors that contributed to and shaped expansion in this important sector:

Table 3 summarizes data on sources of manufacturing (gross output) growth estimated for Turkey and four other countries over approximately comparable historical periods. The sample countries include Mexico, which historically pursued an inward-oriented growth strategy, and super-exporters like Korea and Taiwan, which adopted export-based strategies early in their postwar growth efforts.

From demand side, four sources of output change are identified: (1) domestic final demand expansion (DD), (2) export expansion (EE), (3) import substitution (IS), and (4) changes in input-output coefficient(10). The sources of growth contributions have been computed in identical input-output frameworks, and are measured as effects.<sup>7</sup> For the Turkish case, time periods closely correspond to development policy episodes discussed in Section 2. With the usual caveats on the imperfect nature of methodology and data, a number of inferences may be drawn from estimates shown in Table 3.

The Turkish manufacturing, as in the case of Mexico, relied heavily on domestic demand changes as a source of expansion for the early 1950s onwards. The shifts in the composition of domestic final demand for manufacturing reflected mainly the relatively high income from non-food items in private consumption, and rising share of capital formation in total spending.

The changes in input-output coefficients (10) augmented DD as a source of growth through the widening and deepening of interindustry

relationships. From 1953 to 1977, the contribution of export expansion was notable only during 1968-73, reflecting the short-lived export incentives (and world trade boom) in the post-1970 devaluation episode.

The demand-side contribution of import substitution as a source of growth in manufacturing was quite limited in the Turkish experience from 1953 to 1977. The intensified import barriers in 1963-68 resulted in somewhat more pronounced import-substitution (IS) effects during this interval. The initial conditions featuring low values for import/output ratios largely explain the limited role of IS as a growth contributing demand item. Hence, it would be more appropriate to use the term inward-oriented rather than import-substituting to characterize on industrialization process that centers on domestic demand under policy regimes which feature an anti-export bias in manufacturing.

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**The Turkish experience represents a case where the inward-oriented policies served to develop a relatively large and diversified industrial base before a decisive switch was introduced toward an export-led growth process.**

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The sources decompositions for the 1978-81 sub-periods indicate a reversal in the respective roles of domestic demand and exports in manufacturing growth. During 1978-81, the sharp fall in domestic demand was partly alleviated by the export rise in 1981. In the 1981-84 sub-period, about 50 percent of the rise in output in manufacturing could be attributed to export expansion in the economy, including the intermediate demand effect of exports in non-manufacturing sectors. It may be

noted that the contribution of import substitution was negative in export expansion episodes in Turkey. This phenomenon reflects the rise in imported inputs, and relaxation of restrictions on competitive imports to reinforce export promotion measures. The important implication is that the trade-liberalization process may require a substantial amount of capital inflow in the earlier phases of the new strategy.

A comparison of the sources of growth estimates for Turkey, Korea and Taiwan crystallizes the alternative sequencing possibilities in the long management of the industrialization process. The export expansion became

a prominent source of manufacturing growth at the earlier stages of development in Korea and Taiwan. These two countries started with light manufactured exports and subsequently shifted to heavier manufacturing branches.<sup>8</sup> A similar but less pronounced pattern is observed for Israel.

In turn, the Turkish experience represents a case where the inward-oriented policies served to develop a relatively large and diversified industrial base before a decisive switch was introduced toward an export-led growth process. Documentation to illustrate the extent of export diversification in Table 4 shows data on the commodity structure of manufactured exports over the 1980-85 period. These data clearly indicate the significant export contributions from Turkey's capital-intensive intermediate goods and metal-fabricating industries which benefited from heavy protection in the inward-oriented policy episodes prior to the adoption of the 1980 liberalization reforms.

### Implications

The present paper reviewed Turkey's development policy phases, and examined structural transformation and industrialization in the historical 1950-85 period. Referring the reader to other sources containing more detailed data, the analysis sought to provide a historical perspective on Turkey's post-1980 economic recovery from the debt crisis of the late 1970s.

The broad implications emerging from our evaluation are the following:

(i) The sources of growth decomposition serves as a useful analytical framework to delineate the engines of industrial expansion under different policy phases over a given time horizon. In contrast to the sequence of industrialization observed in Korea and Taiwan, Turkey's export-led manufacturing growth appeared quite late in the transformation process. The Turkish experience seems to provide a qualified support to the "infant industry" argument, which stresses the need to establish a diversified output structure and industrial base before embarking upon an outward-oriented growth path in developing countries with relatively large domestic markets.

(ii) The available data on factor allocation in Turkey points, however, to limited employment generation in an inward-oriented industrialization process. The counterpart of limited labor-absorption is the rising capital

intensity of manufacturing in a capital-constrained economy. Hence, in the Turkish setting, an earlier switch to a more balanced trade and industrial strategy could have resulted in an economically more viable adjustment response to the external shocks of the 1970s.

(iii) Turkey's post-1980 export-led recovery has been largely based on industrial productive capacities built in the earlier periods. The adjustment process entailed sharp cuts in real wages and domestic expenditures. The future growth needs to be based on new capital formation and productivity improvements in the export-oriented sectors.

(iv) Finally, our ex-post review suggests that the long-term effectiveness of the industrialization process closely depends on the maintenance of appropriate policy regimes. Under outward-orientation, the policy process needs continuity in the maintenance of adequate incentives, and flexibility in coping with rapidly shifting external economic conditions.

## NOTES

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<sup>1</sup>Merih Celasun and Dani Rodrik: "Turkish Experience with Debt: Macroeconomic Policy and Performance," in Jeffrey Sachs, *Developing Country Debt*, (forthcoming from the University of Chicago Press).

<sup>2</sup>For a trade-focused evaluation of the Turkish economy during 1950-71, see Anne O. Krueger, *Foreign Trade Regimes and Economic Development: Turkey*, (New York, Columbia University Press, 1974).

<sup>3</sup>For an analysis of external shocks, see World Bank: *Turkey, Industrialization and Trade Strategy*, (Washington, DC, 1982,) pp. 39-43.

<sup>4</sup>For a general analysis of the Turkish economy in 1973 - 77, see Kemal Dervis and Sherman Robinson, *The Foreign Exchange Gap, Growth and Industrial Strategy in Turkey: 1973 - 83*, (World Bank Staff Working Paper, No. 306, Washington, DC, 1978)

<sup>5</sup>See Merih Celasun, "Income Distribution and Domestic Terms of Trade in Turkey: 1973-83," *METU Studies in Development*, 13 (1,2) 1986, pp. 193-216.

<sup>6</sup>The present discussion partly draws on Merih Celasun, *Sources of Industrial Growth and Structural Change: The Case of Turkey*, (World Bank Staff Working Paper No. 614, Washington, D.C, 1983.)

<sup>7</sup>For the underlying methodology, see Hollis Chenery, Sherman Robinson and Moshe Syrquin, *Industrialization and Growth-A Comparative Study*, New York, Oxford University Press, 1986, pp. 132-37.

<sup>8</sup>For sectoral details, see Chenery et al., op. cit., 148-187.

## ANNEX

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**Table 1: Turkey-Basic Data**

**A. Major Indicators (1986)**

Population	50.9 million
Employment	16.3 million
Unemployment	12.0 percent (excluding labor surplus in agriculture)
GNP	59.3 billion \$ (at official exchange rate)
GNP per capita	1165.0 \$ (at official exchange rate)

**B. Growth Rate (% per year)**

	1953/63	63/73	74/77	77/79	79/85
GNP	4.8	6.7	6.8	1.2	3.6
Agriculture	3.2	2.3	6.8	2.8	2.4
Manufacturing	8.5	10.1	7.9	-1.7	5.7
GNP per capita	2.0	4.0	4.7	-0.9	1.2
Prices GNP deflator	10.6	9.6	21.6	56.5	47.4
Agriculture deflator	10.2	10.5	23.3	41.8	43.8
Foreign trade	5.6	-3.7	-4.5		

## DEVELOPMENT POLICY IN TURKEY

### C. Merchandise Exports

	1980	1981	1983	1984	1985
Total (million \$)	2910	4703	5728	7133	7958
By sector(%)					
Agriculture	57.5	47.2	82.8	24.5	21.6
Mining	6.5	4.1	3.3	3.4	3.1
Manufacturing	36.0	48.7	63.9	72.1	75.3
By region					
(%) EEC countries	42.7	32.0	35.1	38.3	39.4
Other OECD members					
Middle East	15.0	16.2	13.1	14.1	12.2
North Africa	17.0	40.3	41.1	42.0	42.8
Others	25.3	11.7	5.6	5.6	

### D. External Debt

	1973	1978	1983	1985	1986
Debt (billion\$)	3.3	14.4	18.4	25.0	31.2
Debt/GNP	0.36	0.48	0.53		
Debt/XGS	2.31	2.22	2.79		
Debt service/XGS	0.32	0.32	0.38		

a. XGS is exports of goods and services (excluding worker's remittances) sources: State Planning Organization and Central Bank of Turkey and OECD Economic Surveys, Turkey 1986/87, Paris (for panel c data).

**Table 2: Sectoral Structure**

<b>A. GDP (% 1968 producers Price)</b>	<b>1953</b>	<b>1963</b>	<b>1973</b>	<b>1983</b>
Primary	41.5	35.0	22.9	23.1
Manufacturing	11.5	16.3	21.2	22.5
Social overhead	12.1	12.7	16.1	16.6
Services	28.7	31.1	34.3	35.8
Import taxes	6.2	4.9	5.5	2.0
<b>B. Employment (%)</b>				
Primary	79.2	77.6	64.8	61.4
Manufacturing	6.0	7.5	10.2	10.8
Social overhead	2.9	5.0	7.2	7.8
Services	11.9	9.9	17.7	20.0
<b>C. Ratio of Agricultural and Food Imports to Agricultural Output (%)</b>	1.1	2.3	1.0	2.5
<b>D. Fixed Investment (%)</b>	<b>63-67</b>	<b>68-72</b>	<b>73-78</b>	<b>79-83</b>
Agriculture	15.2	11.8	11.0	10.0
Mining	4.3	3.7	5.3	
Manufacturing	20.9	25.6	30.2	25.6
Social overhead	21.7	24.9	26.4	33.3
Services	37.9	34.2	28.7	25.8

Sources: Celasun, *op cit.* (note 6) for pre-1973 data. State Planning Organization for post-1973 data.



**Table 3: Sources of Growth in Manufacturing Output**

Annual average		Sources % of growth rate			
Turkey	(%)	DD	EE	IS	IO
1953-63	6.4	81.0	2.2	9.1	7.7
1963-68	9.9	75.2	4.5	10.4	9.9
1968-73	9.4	76.2	10.7	-1.5	14.6
1973-77	.0	100.4	-1.0	0.6	0.0
1977-81	-3.0	-36.7	81.5	-143.9	-1.0
1981-84	6.5	55.6	55.6	-6.8	-0.2
Mexico					
1950-60	7.0	71.8	3.0	10.9	14.4
1960-70	8.6	86.1	4.0	11.0	-1.0
1970-75	7.2	81.5	7.7	2.6	8.2
Korea					
1955-63	10.4	57.3	11.5	42.2	-11.0
1963-70	18.9	70.1	30.4	-0.6	0.1
1970-73	23.8	39.0	61.6	-2.5	1.8
1956-61	11.2	34.8	27.5	25.4	12.3
1961-66	16.6	49.2	44.5	1.7	4.6
1966-71	21.1	34.9	57.0	3.8	4.3
Israel					
1958-65	13.6	58.9	26.2	9.8	5.2
1965-68	9.4	68.7	54.8	-27.7	4.2

a. Measured as percentages of change in manufacturing gross output; add up to 100 percent.  
 DD is domestic final demand expansion      EE is export expansion  
 IS is import substitution      IO is change in input-output coefficients.

b. For all sectors Source: Celasun, *op. cit.* (Note 6) for Turkey 1953-73; Jeffrey D. Lewis and Shujiro Urata, Turkey-Recent Economic Performance and Medium-Term Prospects, 1979-1990, World Bank Staff Working paper No. 602, Washington, D.C. for Turkey 73- 84; and Chenery et al, *op. cit.* (Note 7) for other countries.

**Table 4: Commodity Structure of Manufactured Exports**

(million \$)	1979	1981	1983	1985
A. Processed Agricultural Products	151	412	670	647
B. Manufactured products	634	1,878	2,988	348
Textiles and clothing	803	1,289	1,790	378
Hides and leather	44	82	1,982	484
Forestry	2	20	15	1,066
Chemicals	23	94	120	266
Rubber and plastics	3	72	77	108
Petroleum products	-	107	232	372
Glass and ceramics	37	102	108	190
Cement	45	198	81	44
Iron and steel	31	100	407	969
Non-ferrous metals	15	30	79	116
Metal products and machinery	18	85	122	450
Electrical equipment	4	26	69	119
Other	34	199	187	334
C. Exports				
Total (A+B)	785	2,290	3,658	5,995

Source : OECD, Economic Surveys, Turkey, 1968/87, Paris