

# EXPORT-IMPORT PERFORMANCE AND ECONOMIC GROWTH :

## Some Evidence from Turkish Economy

Nejat ERK\*

*This paper employs two complimentary techniques to test the impact of foreign trade on output, productivity and on employment between 1971-1981 for Turkey. The findings are striking: approximately one million potential job losses in the manufacturing sector and only a few manufacturing subsectors passed the absorption test. The agriculture sector created approximately six hundred thousand new jobs and the sector as a whole passed the absorption test.*

*We conclude that not withstanding the recent impressive success in exporting manufacturing goods, the Turkish economic planning efforts must not neglect the agricultural sector for the reasons discussed in the paper.*

### I. INTRODUCTION

Export performance of a developing country is effected by a variety of internal and external factors. These factors include, among others, government's fiscal policies and export incentives; growth of demand in the industrialized countries; and the degree of protectionism that might be prevalent in the world.

This paper attempts to analyze the Turkish export/import structure and the effects of international trade on output, employment and on labor productivity. Although several methodologies are available to analyze pertinent data on the topic under review, we have selected the "growth accounting" methodology primarily because it allows us to separate effects of changes in domestic demand on labor productivity and on trade structure. Labor productivity seems to increase with experience gained by long production runs induced by domestic and foreign demand (Lennep, 1979:83).

The first part of this paper evaluates production and export/import performance of Turkish economy during 1971-1981. The second part analyzes the direct and projected employment content of Turkish international trade.

### II. STATISTICAL EVIDENCE FOR 1971-1981

To provide as comparison between Turkish performance and several other newly industrializing countries, we have obtained United Nations data which form Table 1 below.

---

\*Author is an associate professor at the Department of Economics, Çukurova University and in Maryland University European Division.

**TABLE I. PER CAPITA INCOME, EXPORT/IMPORT SHARE IN GNP AND EXPORT/IMPORT GROWTH RATES IN NEWLY DEVELOPING COUNTRIES**

	Per Capita Income \$ (1982)	Trade In 1982 Million \$		Export And Import Share In GNP	
		Exports	Imports	Exports	Imports
TURKEY	1280	5701	8753	0.10	0.15
GREECE	3790	4297	10023	0.12	0.27
PORTUGAL	2398	4111	9313	0.17	0.39
SPAIN	4942	20522	31535	0.11	0.17
YUGOSLAVIA	2791	10752	14100	0.17	0.44
REP.KOREA	1663	21853	24251	0.34	0.38
BRAZIL	2370	20190	22637	0.07	0.08

**SOURCES :** World Statistics in Brief, UN. Statistical Handbook Newyork, 1983  
Yearbook of National Accounts, UN. Vol. II. Newyork 1983.

This table shows that in 1982, Turkey, while pursuing an import substitution policy, generated 10 percent of its Gross National Product (GNP) from exports and 15 per cent from imports. The export/import share in the GNP was the second lowest among the seven newly industrilizing countries, the sole exception being Brazil. Similarly, the average growth rate of Turkish exports/imports during the same period was, once again, second lowest in the group, in this case, out performing Portugal.

Table 2. shows the deflated values of production and exports/imports in the manufacturing sector between 1971-1981. (These figures are given in million Turkish liras). This table also shows that in the manufacturing sector, consumer goods were relatively more export oriented than were intermediate and investment goods. Within the consumer goods category, the textile products subcategory made a highly significant contribution in 1981, when it obtained 41 per cent of the total foreign exchange earnings of consumer goods (Appendix A). The Turkish textile export performance was highly successful because this industry enjoys comparative advantages in labor cost (labor intensive technology is being used by the industry), raw materials, and in having a domestic market that permits the industry to obtain and benefit from economies of scale.

**TABLE 2. MANUFACTURING SECTOR OUTPUT, EXPORT AND IMPORTS AT  
CONSTANT PRICES (1971-1981)**

**1975=100**

	MILLION TL.					
	1971	1972	1974	1979	1980	1981
<b>CONSUMER GOODS</b>						
output	110647	177747	128142	132923	142186	166558
export	7727	4064	12093	10782	12302	18752
import	3473	6434	2262	795	2124	2027
<b>INTERMEDIATE GOODS</b>						
output	68792	78877	106278	186077	117967	133119
exports	1203	2155	4254	2130	2773	17901
imports	11778	15614	22046	19476	22495	32734
<b>INVESTMENT GOODS</b>						
output	24260	22763	39307	40825	32936	37970
exports	256	163	521	475	856	2772
imports	12485	18007	19384	13578	12739	12864
<b>SECTORIAL TOTAL</b>						
output	203699	234387	273727	358825	293116	337647
exports	9786	6382	16868	13387	1531	39425
imports	27736	40055	43692	33849	37358	47625

**SOURCES :** Annual Programs. State Planning Organization. Ankara Yearbook of national Accounts. Vol II. International Tables. Newyork. 1981 p.463

While the textile industry's export efforts have been rewarding, the performance of the other industries in the manufacturing category has shown wide fluctuations. This was primarily due to a low import demand of foreign countries; insufficient promotional efforts, compared with the promotional efforts of Turkey's competitors; and a lack of inter interest in and ability and knowledge of international marketing and exporting processes. "Both those who maintain that weak external demand is the major cause of sluggish export earnings of developing countries and those who argue that the predicament of these countries is caused by their own misguided policies have reached these extreme conclusions through partial analysis of historical facts." (Kavoussi, 1985:390). It could be recalled that historically Turks generally did not engage in foreign commerce, an activity that was entirely left in the hands of non-Turkish groups in the Ottoman Empire. Thus, Turks did not accumulate sufficient experience in the field of international trade. Consequently, they

lagged far behind their competitors in establishing an efficient international marketing and export system for their products. Furthermore, turke until recently did not maintain an adequate road and transport system, a situation that further delayed the country's integration and active role in international commerce. It was not until the 1950s that the Turkish government realized the necessity of making large scale invstments in economic infrastructure which, a decade later, propelled the country toward industrialization. In the 1970s, after a delay of almost 150 years, an industrial "revolution" began te taki place in the country.

**TABLE 3. AGRICULTURAL SECTOR OUTPUT, EXPORT AND IMPORTS AT  
CONSTANT PRICES (1971-1981)  
1975=100**

	1971	1972	1974	1979	1980	1981
<b>CROPS</b>						
output	110313	104857	116756	92360	147778	177226
exports	7532	7274	5129	5949	9375	18733
imports	72	170	4156	12	25	936
<b>LIVESTICK PRODUCTS</b>						
output	57687	59782	56860	55775	68264	90910
exports	900	692	842	525	1451	5097
imports	450	486	315	276	377	911
<b>FORESTRY PRODUCTS</b>						
output	4565	8069	5938	8481	11616	14185
exports	-	179	94	62	164	448
imports	7	4	30	-	64	6
<b>FISHERY PRODUCTS</b>						
output	923	1353	1086	1457	2594	3424
exports	162	258	237	158	204	501
imports	-	-	-	-	-	-
<b>SECTORIAL TOTAL</b>						
output	173488	174061	180640	158073	230252	285745
exports	8594	8403	6302	6694	11194	24779
imports	529	660	4501	288	466	1853

**SOURCES :** Annual programs, State Planning Organization, Ankara yearbook of National Accounts, Vol II, International Tables IN, 1981 Newyork, p.463

Traditionally, agricultural commodities have been the dominant factor in Turkish exports. Until as recently as the 1970s, agricultural products were the largest foreign exchange earners. Table 3. shows the deflated values of agricultural output, export and imports. During the period under review, 1971-1981, tobacco, cotton, grapes and olives prevailed in the agricultural export sector. For example, in 1970, tobacco and cotton exports earned 57 per cent of the total earnings of the agriculture sector; and their share in the total export earnings was 42 per cent. Although these figures are impressive for the agriculture sector, this sectors dominant position began to decline in 1971. This decline continued during the 1970s and in the first year of following decade, 1981, the combined export share of tobacco and cotton was 35 per cent of the agricultural and 16 per cent of the total export earnings (Hale, 1981:14). Thus the year 1980-81 has become a landmark in the annal of Turkish exports, because in that year the export earnings of manufactured goods exceeded that of agricultural products Table 4.

**TABLE 4. EXPORT STRUCTURE OF TURKEY**

	2963-67	1973-77	1980	1981	1982
*TOTAL EXPORTS MILLIONS	451	1684	2910	4703	5746
OF WHICH (%) AGRICULTURAL PRODUCTS	79.3	60.1	57.5	47.2	37.3
MINERALS	4.6	5.6	6.6	4.1	3.0
INDUSTRIAL PRODUCTS	16.7	34.2	36.0	48.7	59.7
*For 1963-67 and 1973-77 annual averages					

SOURCES : For 1963-67 William Hale, The Political And economic Development Of Modern turkey, London, 1981, 232-33 For 1980 Briefing, Ankara, Oct.12,1981, 21 For 1981-82 ibid. July,1983,23

## A. THE MODEL

Having discussed general trends in the Turkish export/import activities and the country's relative position with the other newly industrializing countries, we should, at this stage, (1) measure absorption in each sector; (2) find imports in absorption; and (3) find export share in each absorption. Table 5. shows domestic absorption, calculated as (output + imports - exports); imports in absorption, calculated as (imports divided by absorption); and exports in output, calculated as (exports divided by output).

**TABLE 5. ABSORPTION AND ROLE OF TRADE IN MANUFACTURING  
1971-1981**

	MILLION TL					
	1971	1972	1974	1979	1980	1981
<b>CONSUMER GOODS</b>						
D.A.	106388	130117	118311	122936	132008	149833
I.A.	0.03	0.05	0.02	0.01	0.02	0.01
E.O.	0.07	0.03	0.09	0.08	0.09	0.11
<b>INTERMEDIATE GOODS</b>						
D.A.	79367	92336	124070	203423	137689	137952
I.A.	0.15	0.17	0.18	0.10	0.16	0.17
E.O.	0.02	0.03	0.04	0.01	0.02	0.13
<b>INVESTMENT GOODS</b>						
D.A.	36489	45607	58170	53928	44846	58062
I.A.	0.34	0.40	0.33	0.25	0.28	0.39
E.O.	0.01	0.01	0.01	0.01	0.03	0.07
<b>SECTORIAL TOTAL</b>						
D.A.	222244	268060	300551	380287	314543	345847
I.A.	0.13	0.15	0.15	0.09	0.12	0.14
F.O.	0.05	0.03	0.06	0.04	0.05	0.12

(D.A. : DOMESTIC ABSORPTION, I.A. : IMPORTS IN E.O.: EXPORTS IN OUTPUT)

Table 6. Reflects the performance of the agricultural sector during the 1971-1981 period.

TABLE 6. ABSORPTION AND ROLE OF TRADE IN AGRICULTURE

1971-1981

	MILLION TL					
	1971	1972	1974	1979	1980	1981
<b>CROPS</b>						
D.A.	102853	97753	115783	86423	138425	159429
I.A.	--	--	0.04	--	--	0.01
E.O.	0.07	0.07	0.04	0.06	0.06	0.11
<b>LIVESTOCK PRODUCTS</b>						
D.A.	57237	59576	56333	5526	67190	86724
I.A.	0.01	0.01	0.01	0.01	0.01	0.01
E.O.	0.02	0.01	0.01	0.01	0.02	0.06
<b>FORESTRY PRODUCTS</b>						
D.A.	4572	7894	5874	8419	11516	13743
I.A.	--	--	0.01	--	0.01	--
E.O.	--	0.02	0.02	0.01	0.01	0.03
<b>FISHERY PRODUCTS</b>						
D.A.	761	1095	849	1299	2390	3123
I.A.	--	--	--	--	--	--
E.O.	0.18	0.19	0.22	0.11	0.08	0.01
<b>SECTORIAL TOTAL</b>						
D.A.	165424	166318	178840	151668	219524	263019
E.O.	0.05	0.05	0.03	0.04	0.05	0.09

## B. THE FINDINGS

Since the primary purpose of this analysis is to measure the effects of exports/imports on output performance, the role of services and capital flow will not be taken into consideration. It is assumed that if domestic absorption exceeds domestic production, the resulting shortfall will be met by sufficient imports.

As we apply the above-described model to the output data of the manufacturing sector, we discover that the output of consumer goods was sufficient for domestic absorption during the entire period under review, with the exception of 1972 when the country imported large quantities of consumer goods due to abundance of hard currencies remitted by Turkish workers abroad. While the production of consumer goods was sufficient

for domestic consumption, the production of intermediate and investment goods was insufficient to meet the domestic demand. The consumer goods sector was successful primarily due to efficient performance of the textile industry.

In examining the domestic output for export values, we find that even some of the highly export-oriented industries showed only a modest growth. This lack of sufficient growth may be attributed to a sluggish expansion of export markets and to supply constraints (Appendix B).

In analyzing the subsectors of the manufacturing sector, we find that apart from textiles, food, tobacco, leather, leather products and non-ferrous metal industries also have a promising future in the export sector.

The agriculture sector also passed the absorption criterion. In this sector, crops and fishery products were more successful than were the livestock and forestry products. Although their export values were marginal, the fishery products export percentage in the output was high but unstable during 1971-1981. For most of the same period, except 1981, the crops export share in output was not high, but it was stable.

### **III. EMPLOYMENT CONTENT OF TURKISH EXPORTS AND IMPORTS**

In this section, we will analyze foreign trade's effects on employment and labor productivity in Turkey. On the contrary what we are going to test in the next section, some earlier studies tested productivity as a source of export performance (Beckerman, 1972:912-27).

#### **A. THE MODEL**

In order to achieve our goal, the first step will be to quantify the direct employment content of Turkish export/imports. Due to unavailability of employment data at the subsector levels in the agriculture and manufacturing sectors, no generalizations in this respect will be possible. While calculating the employment content, the following formulae will be used :

### **Employment Content**

$$\text{Of Exports} = X_i / Q_i \cdot E_i$$

### **Employment Content**

$$\text{Of Imports} = M_i / Q_i \cdot E_i$$

In the second part of this analysis, the projected employment content of foreign trade will be calculated by the following formulae : (Lenneq, 1979:85)

### **Projected Employment**

$$\text{Content Of Exports} = X_{i0} / Q_{i0} \cdot E_{i0} (r_i^* - l_i)$$

where,

$X_i$  = Exports in sector i

$M_i$  = Imports in sector i

$E_i$  = Employment in sector i

$X_{i0}$  = Exports in sector i in the initial period (1971)

$M_{i0}$  = Imports in sector i in the initial period (1971)

$E_{i0}$  = Employment in sector i in the initial year (1971)

$g_i^*$ ,  $r_i^*$  = Projected annual growth rate of imports or exports in sector i over the period 1971-81

$l_i$  = actual annual growth rate of labor productivity in sector i over the period 1971-81

## **B. THE FINDINGS**

Using the employment data in Table 7, and the output, export/import data in Table 2, we have calculated the employment content in export/import, as shown in Table 8.

TABLE 7. EMPLOYMENT IN MANUFACTURING AND AGRICULTURE

1971-1981

MILLION

Years	Employment in Manufacturing	Employment in Agriculture
1971	1.450	8.763
1972	1.371	8.760
1973	1.484	8.760
1974	1.555	8.700
1975	1.618	8.705
1976	1.700	8.680
1977	1.592	9.546
1978	1.610	9.538
1979	1.572	9.529
1980	1.548	9.520
1981	1.593	9.512

SOURCES : Economic Reports 1973-82, Union of Chamber of Commerce, Industry, Maritime, Commerce And Commodity Exchanges of Turkey, Ankara.

TABLE 8. EMPLOYMENT CONTENT OF TURKISH MANUFACTURING AND AGRICULTURE 1971-1981

	Employment Content of Manufacturing Exports	Employment Content of Manufacturing Imports	Employment Content of Agriculture Exports	Employment Content of Agriculture Imports
1971	0.07	0.20	0.43	0.03
1972	0.04	0.23	0.42	0.03
1973	0.15	0.14	0.55	0.04
1974	0.10	0.28	0.30	0.22
1975	0.07	0.28	0.26	0.10
1976	0.08	0.26	0.39	0.02
1977	0.05	0.17	0.30	0.04
1978	0.06	0.16	0.49	0.01
1979	0.06	0.18	0.40	0.02
1980	0.08	0.20	0.46	0.02
1981	1.19	0.22	0.32	0.06

While these calculations show that the net effect of trade on employment in the manufacturing sector was negative during most of the 1971-1981 period, 1973 and 1981 beign the exceptions in this respect, these figures do not allow us to find a specific trend. This set of data reflect a trade deficit during the period under discussion. Once again the textile sector was an exception. (Table 9)

**TABLE 9. EMPLOYMENT CONTENT TURKISH FOREIGN TRADE IN TEXTILE INDUSTRY 1977-1980**

	Employment Content of Textile Exports	Employment Content of Textile Imports
1977	0.014	0.001
1978	0.019	0.001
1979	0.204	0.013
1980	0.025	0.004

**EMPLOYMENT DATA SOURCE :** Türkiye AET Dis Ticaret İlişkileri Çerçevesinde  
Tekstil Ticareti. SPO No : 1869, Ankara, Feb. 1983.

During 1977-1979, the net effect of trade on employment was positive and progressive. In 1977, for example, the employment content of textile exports was ten times greater than the employment content of imports; 15.83 times higher in 1973, and 16.19 times higher in 1979, reflecting an growing trade surplus.

An analysis of the agricultural sector data on employment shows that the net trade effect on employment was positive in every year during 1971-1981. However, while the net trade effect on employment was positive for 1974 and 1975, this effect could not be construed as fully satisfactory when this data is compared with several other sets of data. For example, in 1980 the employment content of agricultural exports was 23 times greater than the employment content of agricultural imports.

In view of the export-oriented policies initiated by the Turkish government in 1980, the year 1981 shows improvement both in the manufacturing and agriculture sectors. (Table 10)

**TABLE 10. AVERAGE PRODUCTIVITY IN MANUFACTURING AND AGRICULTURE (Q/L) TL**

	MANUFACTURING SECTOR	AGRICULTURAL SECTOR
1971	140478.62	39595.58
1972	170960.61	39739.84
1973	177701.48	36142.58
1974	173590.35	41526.55
1975	198219.49	42706.02
1976	261142.94	51229.26
1977	203866.83	44290.38
1978	205301.24	211317.15
1979	228896.31	33177.35
1980	189351.42	48372.27
1981	211823.71	60220.88

**NOTE :** Average productivity seems high in manufacturing due to the fact that employment data only covers the insured labor force.

By analyzing the set of data for 1971-1981, we have reached the following conclusions :

**Manufacturing Sector**

Average change of growth in exports = 30329 million TL  
 Average change of growth in imports = 19889 million TL  
 Average change of growth in production = 7134.4 million TL

**Agriculture Sector**

Average change of growth in exports = 3237 million TL  
 Average change of growth in imports = 264.8 million TL  
 Average change of growth in production = 2062.5 million TL

Projected Employment  
 Content Of = 1623.62  
 Manufacturing Exports

Projected Employment  
 Content Of = 2550.92  
 Manufacturing Imports

Projected Employment  
 Content Of = 505.02  
 Agricultural Exports

Projected employment  
 Content Of = 5395  
 Agricultural Imports

(initial year 1971)

**Projected Employment Effect Of Turkish Foreign Trade In Manufacturing  
 And Agriculture**

Employment Content of Manufacturing Exports	Employment Content of Manufacturing Imports	Employment Content of Agriculture Exports	Employment Content of Agriculture Imports
1623.62	2550.92	505.02	-53.95

The above figures show us that in the manufacturing sector foreign trade has caused the loss of 927,000 potential jobs (column 1 minus column 2). However, in the agriculture sector, the effects of trade were positive. This sector created opportunities for additional 558,970 workers. (column 3 minus column 4). The Turkish agriculture productivity index for 1934-1972 also shows a continuous increase from 7.1 in 1934 to 11.5 in 1972 (Bairoch, 1977:38). If we take into consideration the expected 85% increase in cereal prices in international markets between 1981-1990 it becomes incumbent upon Turkey to redouble its agriculture export effort (George, 1982:42). This export effort should continue in spite of the recent impressive successes Turkey has achieved in exporting manufactured goods.

Although it might be possible to make accurate projections about many countries' export/import growth potential, it would not be possible or desirable for us to make such projections for Turkey at this stage. This is so because of the newness of the structural changes that were introduced by the government in 1980. This brief five year period has not produced sufficient and reliable data for accurate projections. However, it might not be inaccurate to state that if the Turkish export performance continues to be as good as in the period 1971-1981, would be inevitable for the country to select new economic priorities and export promotion policies for its manufacturing sector.

#### IV. CONCLUSION

In the narrow Turkish domestic market, an import substitution strategy behind high tariff walls had caused serious obstacles in creating a strong export posture for the Turkish manufacturing and agriculture sectors. Since the traditional export promotion system had failed to obtain stability for the agriculture and manufacturing sectors, economic growth remained stagnant. (Glezakos, 1984 : 621). Consequently, the country was constrained to borrow large amounts of foreign capital to meet its development and budgetary needs. As a result, Turkey in 1985 had to pay 2.6 billion US dollars to service the foreign debt. In the meantime, the foreign exchange value of the Turkish Lira plummeted from 9 TL to 1 US. dollars in 1960 to 412 TL to a US dollar in 1984. Perhaps another factor that caused a delay in Turkey's effort of industrialization was inefficiency in the utilization of foreign exchange resources. Additionally, the resources spent on export promotion did not prove to be cost effective and thus became a serious drain on the countries resources. Since export earnings can be an additional element for the national savings, Turkey failed to utilize this source (Laumas, 1982 : 841).

The methodology used in this paper is rather simple; it rests on several precarious assumptions. For example, while the initial year for the study (1971) was a normal year, as it should be, for Turkish exports/imports, we have assumed that changes in trade balances do not effect exchange rates. Additionally, our trade projections do not take into consideration competition among Turkish firms in foreign markets.

Apart from productivity and absorption tests we have employed here, one should always take into consideration the fact that "that question whether or not growth of an economy is export led, and whether or not differences in growth performance among countries can be accounted for by differences in export performances, is not capable of being answered with a simple yes or no." (Choi, 1983 : 145).

## KAYNAKLAR

- BAIROCH, P. (1977) The Economic Development of the Third World Since 1900, Los Angeles : University of California Press.
- BECKERMAN, W. (1962) "Projecting Europe's Growth", Economic Journal, 72, 912-27.
- CHOI, K. (1983) Theories of Comparative Economic Growth, Ames : The Iowa State University Press.
- GEORGE, S. (1982) "Food Trade Structures and the Balance of Power of LDC's", Development Seeds Of Change, 4, 40-3.
- GLEZAKOS, C. (1984) "Export Instability and Economic Growth", Economic Development and Cultural Change. 32, (3). 615-23.
- HALE, W. (1981) The Political and Economic development of Modern Turkey, London : University of Durham.
- KAVOUSSI, R.M. (1985) "International Trade and Economic Development : The Recent Experience of Developing Countries", The Journal of Developing Areas, 19, 379-92.
- LAUMAS, P.S. (1982) "Exports and Propensity to Save", Economic development and Cultural Change, 30, (4), 831-41.
- LENNEP, E.V. (1979) The Impact Of Newly Industrializing Countries on Production and Trade in Manufactures, Paris : OECD.
- SPO. (1983) Turkiye ve AET Dis Ticaret İlişkileri Cercevesinde Tekstil Ticareti. Ankara : State Planning Organization No : 1869.

**DEFLATED VALUES OF OUTPUT, EXPORTS AND IMPORTS IN  
MANUFACTURING 1971-1981 (1975=100) MILLION TL**

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>1. FOOD MANUFACTURING</b>						
OUTPUT	67732	68233	72897	86281	100119	122698
EXPORTS	4595	350	6163	6136	6694	6858
IMPORTS	3075	6030	1722	600	1640	1401
<b>2. BEVERAGE INDUSTRY</b>						
OUTPUT	3128	3590	3647	5697	5468	4887
EXPORTS	25	49	54	35	42	86
IMPORTS	10	15	19	--	--	3
<b>3. TOBACCO PRODUCTS</b>						
OUTPUT	7641	7605	7796	11148	11724	12336
EXPORTS	2036	2368	3178	1452	2069	4064
IMPORTS	--	--	--	--	--	--
<b>4. TEXTILE PRODUCTS</b>						
OUTPUT	32141	48319	43802	29797	24875	26637
EXPORTS	1071	1297	2698	3159	3497	7744
IMPORTS	388	389	521	195	484	623
<b>5. MANUFACTURE OF WOOD</b>						
OUTPUT	7184	7395	10138	12219	10133	9958
EXPORTS	99	96	231	20	61	259
IMPORTS	--	--	--	--	20	16
<b>6. PRINTING AND PUBLISHING</b>						
OUTPUT	1874	1926	1781	4268	4068	4070
EXPORTS	6	5	9	5	5	5
IMPORTS	105	103	88	40	20	21
<b>7. ELATHER AND LEATHER PRODUCTS</b>						
OUTPUT	4063	5907	8134	5952	5762	6540
EXPORTS	455	571	1193	365	409	797
IMPORTS	98	64	128	7	6	11
<b>8. RUBBER PRODUCTS</b>						
OUTPUT	2639	2520	2523	4828	3492	3058
EXPORTS	23	19	55	19	118	197
IMPORTS	149	167	316	146	59	400
<b>9. PLASTIC PROCESSING</b>						
OUTPUT	1606	2280	3429	2407	2132	4655
EXPORTS	2	7	20	9	34	386
IMPORTS	6	8	43	13	15	53
<b>10. CHEMICAL PRODUCTS</b>						
OUTPUT	10670	11718	11861	10411	10872	13224
EXPORTS	247	255	272	217	401	974
IMPORTS	3094	4890	4981	3032	3879	6018

Continued

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>11. PETROCHEMICAL PRODUCTS</b>						
OUTPUT	549	676	4115	6540	5216	6139
EXPORTS	--	--	16	71	169	873
IMPORTS	895	988	3122	1737	1953	2591
<b>12. PETROLEUM PRODUCTS</b>						
OUTPUT	15930	17757	29817	37878	40744	47349
EXPORTS	63	502	1224	135	469	1030
IMPORTS	792	753	826	6709	7500	5114
<b>13. FERTILIZER PRODUCTS</b>						
OUTPUT	1128	1664	3647	5511	6086	8641
EXPORTS	--	--	--	--	--	--
IMPORTS	1402	1708	1848	3944	4457	2890
<b>14. CEMENT AND CEMENT PRODUCTS</b>						
OUTPUT	3350	3302	3511	5415	5155	5295
EXPORTS	501	378	124	424	403	2315
IMPORTS	--	--	--	--	--	--
<b>15. POTTERY, CHINA</b>						
OUTPUT	1946	2181	2885	3440	2008	2425
EXPORTS	10	2	--	3	8	96
IMPORTS	159	2164	295	124	213	174
<b>16. GLASS AND GLASS PRODUCTS</b>						
OUTPUT	1642	1750	1988	1975	1301	1906
EXPORTS	69	78	169	330	226	681
IMPORTS	86	86	25	11	39	117
<b>17. CERAMIC PRODUCTS</b>						
OUTPUT	727	574	692	726	1279	1237
EXPORTS	--	7	6	31	48	114
IMPORTS	29	3	20	26	8	12
<b>18. IRON-STEEL PRODUCTS</b>						
OUTPUT	10633	13493	14548	14790	12203	12028
EXPORTS	17	46	169	104	122	9721
IMPORTS	3101	2490	7736	2827	2997	4245
<b>19. NON-FERROUS METAL PRODUCTS</b>						
OUTPUT	2721	3133	4226	6331	4747	4777
EXPORTS	212	189	688	397	284	339
IMPORTS	1038	1008	2335	542	694	457
<b>20. FABRICATED METAL PRODUCTS</b>						
OUTPUT	5927	5262	7634	9257	8254	8332
EXPORTS	132	54	169	85	153	578
IMPORTS	730	1221	907	1452	2074	2215

Continued

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>21. MACHINERY PRODUCTS</b>						
OUTPUT	4359	4899	9345	8757	6596	10143
EXPORTS	52	61	187	88	108	682
IMPORTS	7792	9742	9908	6501	5225	13260
<b>22. AGRICULTURAL MACHINERY</b>						
OUTPUT	2222	3245	3794	3314	2496	3417
EXPORTS	2	2	29	17	24	138
IMPORTS	514	845	676	236	408	507
<b>23. ELECTRICAL MACHINERY</b>						
OUTPUT	3140	3361	5096	2819	387	3839
EXPORTS	15	20	11	13	61	215
IMPORTS	1453	1986	1557	1605	1807	2394
<b>24. ELECTRONICS</b>						
OUTPUT	641	834	2195	1706	1618	1386
EXPORTS	2	2	3	26	35	38
IMPORTS	1076	1515	1427	623	933	1122
<b>25. HIGHWAY TRANSPORT VEHICLES</b>						
OUTPUT	6813	8846	9773	13523	9092	10225
EXPORTS	8	5	104	238	448	1113
IMPORTS	--	2015	3597	2423	1895	2958
<b>26. RAILWAY VEHICLES AND PRODUCTS</b>						
OUTPUT	776	809	614	1010	691	429
EXPORTS	34	--	--	2	--	--
IMPORTS	71	215	160	168	186	176
<b>27. MARINE AND PLANE EQUIPMENTS</b>						
OUTPUT	382	507	856	439	329	199
EXPORTS	11	19	18	6	27	8
IMPORTS	849	468	1152	570	211	232
<b>28. SECTORIAL TOTAL</b>						
OUTPUT	203694	234387	273727	359825	293116	337647
EXPORTS	9086	6382	16868	13387	15931	39425
IMPORTS	27736	4005	43612	33849	27358	47625

NOTE : 1-4 CONSUMER GOODS,  
5-19 INTERMEDIATE GOODS  
20-27 INVESTMENT GOODS

SOURCES : Annual programs, State Planning Organization, Ankara Yearbook of National Accounts, Vol II. International Tables, Newyork., 1981, p.463.

**APPENDIX B**  
**ABSORPTION AND ROLE OF TRADE IN MANUFACTURING**  
**1971-1981**

MILLION TL

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>1. FOOD MANUFACTURING</b>						
D.A.	66212	73913	68456	80745	95065	117232
I.A.	0.05	0.08	--	0.01	0.02	0.01
E.O.	0.07	0.01	0.08	0.07	0.07	0.06
<b>2. BEVERAGE INDUSTRY</b>						
D.A.	3113	3556	3612	5662	5426	4804
I.A.	--	--	0.01	--	--	--
E.O.	0.01	0.01	0.01	0.01	0.01	0.01
<b>3. TOBACCO PRODUCTS</b>						
D.A.	5605	5237	4618	9696	9655	8272
I.A.	--	--	--	--	--	--
E.O.	0.27	0.31	0.41	0.13	0.18	0.33
<b>4. TEXTILE PRODUCTS</b>						
D.A.	31458	47411	41625	26833	21862	19516
I.A.	0.01	0.01	0.01	0.01	0.02	0.03
E.O.	0.03	0.03	0.06	0.11	0.14	0.29
<b>5. MANUFACTURE OF WOOD</b>						
D.A.	7085	2799	9907	12199	10092	9715
I.A.	--	--	--	--	--	--
E.O.	0.01	0.01	0.02	--	0.01	0.03
<b>6. PRINTING AND PUBLISHING</b>						
D.A.	1973	2024	1860	4303	4083	4085
I.A.	0.05	0.05	0.04	0.01	0.01	0.01
E.O.	--	--	--	--	--	--
<b>7. LEATHER AND LEATHER PRODUCTS</b>						
D.A.	3706	5400	7069	5594	5359	4854
I.A.	0.03	0.01	0.02	--	--	--
E.O.	0.11	0.10	0.15	0.06	0.07	0.14
<b>8. RUBBER PRODUCTS</b>						
D.A.	2765	2668	2784	4955	3433	3261
I.A.	0.05	0.03	0.11	0.03	0.02	0.12
E.O.	0.01	0.01	0.02	--	0.03	0.06

Continued

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>9. PLASTIC PROCESSING</b>						
D.A.	1610	2281	3452	2411	2113	4322
I.A.	--	0.03	0.01	0.01	0.01	0.01
E.O.	--	--	0.01	--	0.03	0.06
<b>10. CHEMICAL PRODUCTS</b>						
D.A.	13517	16353	16570	13453	14350	18268
I.A.	0.23	0.30	0.30	0.23	0.27	0.33
E.O.	0.02	0.02	0.02	0.02	0.04	0.07
<b>11. PETROCHEMICAL PRODUCTS</b>						
D.A.	1444	1664	7221	8206	7000	7857
I.A.	0.62	0.59	0.43	0.21	0.28	0.33
E.O.	--	--	--	0.01	0.03	0.14
<b>12. PETROLEUM PRODUCTS</b>						
D.A.	16659	18008	29419	44452	47775	51323
I.A.	0.05	0.04	0.03	0.15	0.16	0.10
E.O.	--	0.03	0.04	--	0.01	0.02
<b>13. FERTILIZER PRODUCTS</b>						
D.A.	2350	3372	5495	9455	10543	11531
I.A.	0.55	0.51	0.34	0.42	0.42	0.25
E.O.	--	--	--	--	--	--
<b>14. CEMENT AND CEMENT PRODUCTS</b>						
D.A.	2849	2924	3387	4991	4752	2980
I.A.	--	--	--	--	--	--
E.O.	0.15	0.11	0.04	0.08	0.08	0.44
<b>15. POTTERY AND CHINA</b>						
D.A.	2095	4343	3180	3561	2213	2503
I.A.	0.08	0.50	0.09	--	0.10	0.07
E.O.	0.01	--	--	--	--	0.04
<b>16. GLASS AND GLASS PRODUCTS</b>						
D.A.	1659	1758	1844	1656	1114	1342
I.A.	0.05	0.05	0.01	0.01	0.01	0.01
E.O.	0.04	0.04	0.09	0.17	0.17	0.36
<b>17. GLASS AND GLASS PRODUCTS</b>						
D.A.	756	570	706	721	1239	1135
I.A.	0.04	0.01	0.03	0.04	0.01	0.01
E.O.	--	0.01	0.01	0.04	0.04	0.09
<b>18. IRON-STEEL PRODUCTS</b>						
D.A.	13717	15937	22114	17513	15188	6552
I.A.	0.23	0.16	0.35	0.16	0.20	0.65
E.O.	--	--	0.01	0.01	0.01	0.8

Continued

INDUSTRY GROUP	1971	1972	1974	1979	1980	1981
<b>19. NON FERROUS METAL PRODUCTS</b>						
D.A.	3547	3958	5873	6476	5157	4855
I.A.	0.29	0.26	0.40	0.08	0.14	0.10
E.O.	0.08	0.06	0.16	0.06	0.06	0.07
<b>20. FABRICATED METAL PRODUCTS</b>						
D.A.	6525	6429	8372	10624	10175	9969
I.A.	0.11	0.19	0.11	0.14	0.20	0.22
E.O.	0.02	0.01	0.02	0.01	0.02	0.07
<b>21. MACHINERY PRODUCTS</b>						
D.A.	12099	14580	10066	15170	11713	22721
I.A.	0.06	0.67	0.98	0.43	0.45	0.58
E.O.	0.01	0.01	0.02	0.01	0.02	0.07
<b>22. MACHINERY PRODUCTS</b>						
D.A.	2734	4088	4441	3533	2880	3786
I.A.	0.19	0.21	0.15	0.07	0.14	0.13
E.O.	--	--	--	0.01	0.01	0.04
<b>23. ELECTRICAL MACHINERY</b>						
D.A.	4578	5327	6642	4411	5633	6018
I.A.	0.32	0.38	0.23	0.36	0.32	0.40
E.O.	--	0.01	--	--	0.02	0.06
<b>24. ELECTRONICS</b>						
D.A.	1715	2347	3616	2303	2516	2470
I.A.	0.63	0.64	0.39	0.27	0.37	0.45
E.O.	--	--	--	0.02	0.02	0.03
<b>25. HIGHWAY TRANSPORT VEHICLES</b>						
D.A.	3805	10856	13266	15708	10539	12070
I.A.	--	0.17	0.27	0.15	0.18	0.25
E.O.	--	--	0.01	0.02	0.05	0.11
<b>26. RAILWAY VEHICLES AND PRODUCTS</b>						
D.A.	813	1024	774	1176	877	605
I.A.	0.09	0.21	0.21	0.14	0.21	0.29
E.O.	0.04	--	--	--	--	--
<b>27. MARINE AND PLANE EQUIPMENTS</b>						
D.A.	1220	956	1990	1003	513	423
I.A.	0.70	0.49	0.58	0.57	0.41	0.55
E.O.	0.03	0.04	0.02	0.01	0.08	0.04

(D.A. : DOMESTIC ABSORPTION, I.A. : IMPORTS IN ABSORPTION  
E.O. : EXPORTS IN OUTPUT)

## İHRACAT-İTHALAT PERFORMANSI VE EKONOMİK BÜYÜME : TÜRKİYE DENEYİMİ

Bu çalışma birbirini tamamlayan iki ayrı yöntemin yardımıyla, 1971-1981 yılları arasında Türkiye'nin dış ticaret politikasının ülke içi üretim, verimlilik ve istihdam üzerindeki etkisini incelemektedir. Çalışmanın sonucundaki bulgular oldukça ilginçtir. Nitekim, buna göre imalat sektöründe dış ticaret nedeniyle ülkemizde bir milyona yakın potansiyel iş kaybının olduğu görülmüş olup, alt sektörlerden bir kaçının absorpsiyon testinde yeterli olduğu anlaşılmıştır. Tarım sektöründe ise, aynı etkiler nedeniyle altı yüzbin ek istihdam alanının yaratıldığı ve sektörün tümünün absorpsiyon testinde de yeterli olduğu belirlenmiştir.

Çalışmadaki bulgular göstermiştir ki, 1980 yılından bu yana, bir olumlu gelişme olarak imalat sektörü ihracatının artışı dikkate alındığında, Türkiye'nin ekonomik planlama çabalarının tarım sektörünün gelişmesine de gereken önemi vermesi ulusal çıkarlar açısından bir zorunluluktur.