

## Durham E-Theses

---

*A study of the 1963-1967 Turkish five-year plan for economic development with special reference to investment decisions and resource allocation*

Cevat Katatas

### How to cite:

---

Katatas, Cevat (1966) A study of the 1963-1967 Turkish five-year plan for economic development with special reference to investment decisions and resource allocation. Masters thesis, Durham University.

### Use policy

---

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a <https://etheses.durham.ac.uk/id/eprint/9853/> is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

A STUDY OF THE 1963-1967

TURKISH FIVE-YEAR PLAN FOR ECONOMIC DEVELOPMENT

WITH SPECIAL REFERENCE TO INVESTMENT

DECISIONS AND RESOURCE ALLOCATION

by

CEVAT KARATAS

A Thesis submitted for the Degree of  
Master of Arts in Economics in the University  
of Durham.

The copyright of this thesis rests with the author.  
No quotation from it should be published without  
his prior written consent and information derived  
from it should be acknowledged.

May, 1966.

## INTRODUCTION.

The main ideas contained in the study have been inspired by the First Five-Year Plan of Turkey for the period 1963-1967. The problem of Turkey today is a fast rate of population growth in the face of a relatively slow expansion of her economy with the result that unemployment and underemployment, already at quite a high level, are becoming worse day by day. Over and above this there is also a serious deficit in the country's balance of payments.

It was felt for a long time that these issues could not be adequately tackled unless the country took to comprehensive economic planning, and recognised the fact that planning is essential to balanced development. This was finally acknowledged explicitly in Law No.91 of September, 1960, which created the State Planning Organisation as the Government's Planning and Advisory Body. Later, and more importantly, this organisation was fully endorsed in the new Turkish Constitution of July 1961.

Subsequently, it produced the long-term Development Plan which is based on a fifteen year perspective and indicates that social and economic life in Turkey over this period will be planned subject to the essential safeguards of a democratic system. It was within this framework that it set up the First Five-Year Plan in 1962.

In the preparation of this plan, the national resources were estimated and the possibilities of mobilising these resources were studied. In the light of these studies the planners set the rate of growth of GNP at the compound rate of 7 per cent per annum for the period 1963-67. In determining this rate of growth the aid that could be obtained from abroad was also taken into account. In order to attain a 7 per cent rate of growth during the plan period it was found necessary to invest, on the average, 18.3 per cent of GNP per annum. Of this, 3.5 per cent would be financed from external sources, and 14.8 per cent from domestic saving.

The major questions discussed in this study are:

- 1) the economic structure and current problems of Turkey,
- 2) the economic targets and criteria adopted in the First Five-Year plan, 1963-1967; the extent to which these targets can be achieved and are in line with the country's potential, and
- 3) the appropriateness of decisions on the pattern of investment and resource allocation in the light of theoretical discussions on investment criteria.

Accordingly, the plan of the study has been divided into 3 parts each containing two chapters.

In the first chapter of part I a broad outline of the

characteristics of the Turkish economy has been made with special reference to population, national income (examining also per capita income and the distribution of income), and the contribution of each sector to the national income. The main idea has been to explain the structure of the economy and the problems confronting Turkey's economic development. The 2nd chapter completes the task of providing the background of the economy by describing the effort put into planning and industrialisation during the years following the foundation of the new Turkish Republic in 1923.

Chapter 3 deals with the factors which led up to the government's decision to undertake all development within the framework of a comprehensive plan. The objectives laid down by the Fifteen-Year Development Plan, and the strategic variables on which the plan rests have also been examined in this chapter.

The First Five-Year Plan of the above Development scheme is analysed in chapter 4, in respect of its objectives, scope and the extent to which it may be helpful in solving the basic problems of the economy, i.e., to increase the rate of growth of the real national income, create more employment possibilities, and improve the balance of payments.

Chapter 5 examines the pattern of investment and resource allocation, and the rationale behind the planners' decisions.

Finally, Chapter 6 deals with the methodology of the plan and the investment criteria adopted in its formulation. This is followed by a discussion of the formula which could lead to a more efficient allocation of resources.

The conclusion comprises a brief review of the present economic problems of Turkey together with a summary of the basic points made in the body of the thesis.

There is an appendix which discusses the thesis of Galenson-Leibenstein, concerning the choice of technique as an investment criterion and then attempts to assess its usefulness in relation to specifically Turkish conditions.

---

FOREWORD.

This dissertation has been prepared under the supervision of Mr.M.Chowdhury to whom I owe very special debt of gratitude for his comments and criticisms which have been invaluable in the presentation of arguments and the interpretation of events.

Because of the diversity of sources, it was difficult to use one currency in all tables. Some of them are based on the Turkish lira and some on the U.S.dollar. The rate of exchange since 1958 stabilisation programme has been determined as \$1 = 9 T.liras and £1 = 25.25 T.liras.

Durham University,

DURHAM.

March, 1966.

TABLE OF CONTENTS.

	<u>Page.</u>
INTRODUCTION	i.
FOREWORD	v.
PART I.	
CHAPTER I - National Income and its Composition	
1. Population and its consequences	1.
2- National Income and its variations	6.
National Income Statistics	6.
National Income at Current and Constant Prices.	7.
Per Capita Income	11.
Distribution of Income Between Urban and Rural Population.	15.
3- National Income by Sectors	16.
Agriculture	18.
Industry and Power.	30
Transportation	44.
Commerce	50.
Other Sectors	56
CHAPTER II - History of Economic Planning in Turkey.	
1- Introduction.	58
2- The Emergence of Etatism and its Nature	60
3- The Industrialisation Programmes	68
A- The First Five-Year Industrialisation Plan, 1934-1938.	69

Investments and the Implementation of the First Plan.	72
Industrial Production.	75
B- The Second Five-Year Industrialisation Plan, 1939-1943	78
4- The Planning Organisations:	
A- The Sumerbank	85
B-Role of the Etibank	86
5- Evaluation of the First and Second Five- Year Industrialisations Plans	87

## PART II.

Chapter III-Fifteen Year Development Perspective and  
Plan Strategy.

1- A Survey of Past Developments.	92
2- Fifteen-Year Development Plan - 1963-1977	105
Rate of Growth.	105
Employment	109
Balance in external payments	110
Balanced Growth	112

## Chapter IV-The First Five-Year Plan - 1963-1967.

Objectives of the First Five-Year Plan.	115
1- The Rate of Income Growth.	116
a) Capital-Output Ratio.	122
b) Domestic Savings	123

	<u>Page.</u>
2- Expansion in Agricultural Production and High Productivity Increase in Industry	130
3- Employment and the Activation of Idle Manpower.	140
4- Balance of Payments	147
Imports	149
Exports	151
Invisibles	154
Foreign Debt.	156
5- Social Targets of the Development Plan	157

## PART III.

Chapter V- The Pattern of Investments and Resource.  
Allocation.

1- General Approach	162
2- Mixed Economy	163
3- Investment Policy	167
4- Investment Distribution and Sectoral Analysis	173
Agriculture	174
Industry-Manufacturing, Energy and Mining	183
Housing and Transport and Communications	186
Education and Health	188
Tourism	189
5- The Rational Distribution of Investments	190
6- The Public and Private Sectors	200

	<u>Page.</u>
7- The Split of Investment between Public and Private Sectors.	210
Chapter VI-Investment Criteria.	
1- The Planning Methodology in the First Five-Year Plan	216
A-Input-Output Analysis	216
B-Sector Programmes	218
2- The Balanced Growth and Resource Allocation.	221
3- Investment Criteria	226
CONCLUSION.	242
APPENDIX A- Capital-Intensity Criterion	
BIBLIOGRAPHY	

P A R T I.

CHAPTER I.

NATIONAL INCOME AND  
ITS COMPOSITION.

## I - POPULATION AND ITS CONSEQUENCES.

Population is the first factor which needs to be considered as affecting the development of the Turkish economy. As can be seen from Table I, the rate of population increase in Turkey has approached the very high level of 3 per cent per annum in the recent years. The reason for this high rate is both the increase in the birth rate and the decrease in the mortality rate.

The rate of population is also very high compared with some other countries.

### The Rate of Population Growth in Some Selected Countries.

U.S.	1.5	Iran	2.5
U.K.	0.44	Guinea	2.2
Italy	0.70	N.Rhodesia	2.5
Sweden	1.08	Congo	2.0
Poland	1.77	Ethiopia	1.6
India	2	Peru	2
Pakistan	2.2	Chile	2.2

Source: U.N. Statistical Office of the United Nations, Monthly Bulletin of Statistics, July, 1956, and also see, Robinson E.A.G, Economic Development for Africa South of the Sahara, Mac Millan & Co Ltd., London, p.8

Only a small proportion of the population live in urban areas (16.4 per cent in 1927 rising to 28.7 per cent

in 1960), however during the period 1950-1960 the urban population has increased by 75 per cent whereas rural population has only increased by 20 per cent. This striking difference is due to a recent tendency of people to migrate to urban districts.

The rapid rate of urbanisation in Turkey has been affected by the considerable growth in agriculture, industry and transportation.

i) The majority of the population (71.3 p.c.) are rurally situated and depend on agriculture. The per capita income in agriculture has risen very slowly and during the period 1950-55 this increase was 74.61 T.liras while in other sectors it was 234.62 T.Liras <sup>(1)</sup>. The low productivity in agriculture was accounted for by the un-economic and scattered nature of land holdings and defects in the land ownership and tenure system, and inadequacy in the provision for irrigation and fertilizers and so on. The peasant families who constitute 27.4 per cent of the agricultural population as tenants and share-receiving groups are more or less landless, and the hope to acquire higher incomes and better standards of living makes these people move to urban areas. Further the mechanisation of agriculture (since the Marshall Aid plan in 1948) and its

---

(1) See Türkiye Mille Geliri 1948-1959. İstatistik Genel Müdürlüğü, No.374 p.8.

labour saving nature have also left a large proportion of this population unemployed during the last 15 years. (1)

(ii) The industry showed a very high development in the last decade. The number of industrial areas rose and during 1950-55 the rate of increase in industrial population was 20 per cent and per capita income in the same sector rose by 114 per cent. In the same period, 74 per cent increase in agricultural population was associated with only 59 per cent increase in agricultural per capita income. (2) Industrial growth has also brought increased demand for social services and consequently active population in services rose from 145.000 in 1945 to 455.000 in 1955 (3)

The average wage rate in industrial centres (in big cities like Istanbul, Ankara, Adana) was much higher than the general wage rate which prevailed in the economy. The discrepancy in the wage rates has played a big role in absorbing a large amount of rural population. Actually, the establishment of Trade Unions in Industrial areas, (membership increased from 447,000 in 1952 to 620,000 in 1960) had also encouraged large scale urbanisation.

(iii) The growth of the transportation system has

---

(1) See, Kazgan G, *Sehirler ve Iktisadi Degisme*, IEM, C.19

(2) Dr. Keles, R, *Turkiye de Sehirler ve Planlama Uzerine Etkisi*, *Planlama, Devlet Planlama Teskilah Dergisi*, No.2

(3) *Ibid.* p.84 Cilt 1, Kis 1962, p.84.

been another important factor in stimulating urbanisation. With increased transportation facilities the quantity of passenger and goods carried have shown a rapid increase. The links and communication established between production areas and marketing centres caused a remarkable growth in industry and social services. Newly established industries and trades attracted a great number of rural population to new jobs created by them.

This migration which accelerated after 1950, is still continuing at a slow rate, but it cannot be said that Turkey has experienced an urbanisation anything like the one which has been observed in many West European countries during the 19th Century.

The increase in the population is mostly observed in very large cities and in particular Istanbul has been the one which showed the highest increase. In that period, an annual increase in the population was 0.47 per cent in Istanbul, 0.45 per cent in Ankara and 0.35 per cent in Izmir.

However, urbanisation has resulted in unbalanced growth between Marmara, Aegean and South Anatolia regions on one side, and the East and other parts of the country on the other. Neither public and private investments expenditures in agriculture, industry and transportation have been planned nor have the economic and social problems resulting from urbanisation movement been taken into account

been another important factor in stimulating urbanisation. With increased transportation facilities the quantity of passenger and goods carried have shown a rapid increase. The links and communication established between production areas and marketing centres caused a remarkable growth in industry and social services. Newly established industries and trades attracted a great number of rural population to new jobs created by them.

This migration which accelerated after 1950, is still continuing at a slow rate, but it cannot be said that Turkey has experienced an urbanisation anything like the one which has been observed in many West European countries during the 19th Century.

The increase in the population is mostly observed in very large cities and in particular Istanbul has been the one which showed the highest increase. In that period, an annual increase in the population was 0.47 per cent in Istanbul, 0.45 per cent in Ankara and 0.35 per cent in İzmir.

However, urbanisation has resulted in unbalanced growth between Marmara, Aegean and South Anatolia regions on one side, and the East and other parts of the country on the other. Neither public and private investments expenditures in agriculture, industry and transportation have been planned nor have the economic and social problems resulting from urbanisation movement been taken into account

in the country's resource allocation.

As a result employment created by industrialisation in urban areas has increased at a slower rate than the rate of urbanisation.

Table 1, Population Increase and Composition.

Years	Total population (000)	Urban population (000)	Rural population (000)	Share of Urban population in total population (%)	Total population increase (%)	Urban population increase %	Rural population increase %	Active population in age group 15 & above (000)
1950	20947	4538	16409	21.7	2.82	63.0	17.6	10 020
1951	21536	4824	16712					
1952	22142	5128	17014					
1953	22765	5451	17314					
1954	23406	5794	17612					
1955	24065	6159	17906	25.6	2.95	53.4	20.8	11 620
1956	24775	6488	18387					
1957	25506	6834	18672					
1958	26258	7199	19059					
1959	27033	7583	19450					
1960	27830	7984	19845	28.7				13 200

Source: First Five-Year Development Plan 1963-67, SPO Ankara, 1963, p.12.

## 11. National Income and its Variations.

### I - National Income Statistics:

After the first assessment of the National Income by the Statistics Department of the Ministry of Commerce in 1935, the task was left to the Central Statistical Office (C.S.O.) Although the NI estimates of 1942-44 were published by the C.S.O. in 1947,<sup>(1)</sup> it is regrettable to see that these studies did not continue, and until 1950 the country did not have any formal institution to deal with the NI assessment at all.

In 1950 the National Income Research Group (NIRG) which is attached to the C.S.O, was established and this department for the first time in the history of the Turkish economy had the function of estimating the National Income by scientific and academic methods. The results of its first survey were published as a book in 1954.<sup>(2)</sup>

By considering the figures we have obtained from the Statistics Department and C.S.O, we can conclude that the National Income has recorded a steady increase between 1927 and 1950. The National Income estimates of the Ministry of Commerce, and the C.S.O. are shown below.

---

(1) National Income of Turkey, Central Statistical Office, Ankara, 1947.

(2) See, Cillov.H, Turkiye Ekonomisi, Istanbul 1962. Sermet Matbaasi.

<u>Years</u>	<u>National Income (Million T.L.)</u>
1927	3,360
1936	4,300
1943	6,000
1949	8,390

\* At constant prices.

<u>Years.</u>	<u>National Income (Million T.L.)</u>
1942	1,875
1943	1,404
1947	2,552
1949	2,174

\* On the basis of 1938 prices.

One can hardly rely on these estimates for reaching a conclusion on the National Income growth. For one thing they are based on different methods and sources. Thus it seems necessary to found our studies on the figures obtained from N.I.R.G.

A careful study of the structural peculiarities of the Turkish economy and the relationship between the various sectors should first begin with an accurate analysis of the National Income.

## 2. NATIONAL INCOME AT CURRENT AND CONSTANT PRICES.

The National Income in Turkey is estimated only through the production side. The unreliable and insufficient figures on the expenditure side do not permit us to look at

National Income as allocation to consumption and investment.<sup>(1)</sup>

We shall therefore take the former way in examining the trend followed by the National Income. Table 2, shows the course followed by the NI in terms of current prices during the last 13 years.

Table 2, National Income at Constant & Current Prices.

(Million T.Liras)

Years.	National Income at constant prices (1961 factor prices)	National Income at current prices.
1948	23.875.6	8.814.7
1950	24.744.2	8.964.2
1951	28.469.6	10.693.8
1952	30.898.8	12.424.1
1953	34.382.5	14.696.4
1954	31.206.6	14.785.0
1955	33.516.0	18.219.7
1956	35.789.5	21.196.9
1957	38.045.3	26.023.2
1958	39.660.9	31.474.9
1959	41.343.1	38.387.9
1960	42.834.9	41.995.8
1961	42.022.0	42.022.0

Source: First Five-Year Development Plan, p.13,14.Table 7.

As can be seen from the table 2, the National Income in 1960 was almost five times that of 1950, and double that of 1956. In other words there has been a certain and steady increase in the value of goods and services

(1) First Five-Year Development Plan, SPO.p.15.

Table 2-A National Income According to Production Sectors at Current Prices. (Million T.L.)

	1950	1953	1954	1955	1956	1957	1958	1959	1960	1961
1. Agriculture	4472.0	7234.7	5927.2	7639.2	9096.3	12004.9	13746.2	16357.0	18016.1	17420.9
2. Industry	1094.4	1839.7	2248.4	2578.5	3290.2	4157.8	5418.7	6797.5	7159.1	7220.4
3. Construction	319.2	692.8	852.3	1062.3	1237.6	1672.4	2044.7	2543.2	2216.4	2364.7
4. Commerce.	951.9	1644.1	1797.0	2382.6	2144.1	2243.6	2513.9	3439.1	3787.9	3511.5
5. Transportation.	467.9	863.1	1030.9	1243.5	1452.7	1774.5	2007.6	2444.3	2896.0	2823.7
6. Financial Institutions	152.8	303.3	398.5	521.5	642.7	788.0	954.6	975.9	2967.0	3167.8
7. Professions	353.8	540.1	640.6	841.6	992.3	1184.0	1405.2	1610.8		
8. Income From Dwellings	251.7	354.1	479.8	530.4	712.6	886.9	1196.3	1254.0	1429.8	1581.0
9. Government Services:	911.8	1255.0	1454.6	1494.6	1725.4	2049.8	2333.6	3193.2	3764.4	4182.0
10. Domestic Income	8984.5	14726.8	14829.3	18293.2	21293.9	26762.5	31620.8	38616.0	42236.7	42272.0
11. Income from Abroad	-20.3	-30.4	-44.3	-73.5	-97.0	-139.3	-145.9	-228.1	-240.9	-250.0
12. Net National Product (at factor cost)	8964.2	14696.4	14785.0	18219.7	21196.9	26023.2	31474.9	38387.9	41995.8	42022.0
Index (12) (a)	101.7	166.7	167.7	206.7	240.5	302.0	357.1	435.5	476.4	476.7
13. Indirect Taxes	1014.2	1522.6	1630.5	1934.0	2040.5	2676.1	3084.7	4436.8	4900.0	4998.0
14. Net National Product (at market cost)	9978.4	16219.0	16415.5	20153.7	23237.4	29299.3	34559.6	42824.7	46895.8	47020.0
15. Depreciation	405.9	602.0	690.3	965.8	1096.6	1229.4	1548.4	1879.0	2067.0	2193.0
16. G.N.P. (at market price)										
	10384.3	16821.0	17114.8	21059.5	24334.0	35128.7	36108.8	44703.7	48962.8	49213.0
Index (16) (a)	103.2	167.1	170.0	209.2	241.7	303.3	358.7	444.1	486.4	488.9

Source: SPO. opt. cit. P.13 Table 5, (a) 1948 = 100.

Table 2-B National Income at Constant Prices (at 1961 factor prices)

Million T.L.

	1950	1953	1954	1955	1956	1957	1958	1959	1960	1961
1. Agriculture	12106.8	17033.8	13675.6	149.6.6	16212.6	16621.2	16621.2	17618.5	18376.4	17420.9
2. Industry	4051.3	5238.0	5486.9	5706.3	6078.3	6519.8	6976.0	7321.6	7302.0	7220.4
3. Construction	1322.0	2299.9	1904.8	2000.5	2029.6	2511.7	2700.2	2739.2	2260.6	2364.7
4. Commerce	2275.8	3155.2	2668.5	2882.0	3118.7	3228.9	3699.7	3704.3	3863.5	3511.5
5. Transportation.	1167.1	1664.9	1999.4	2207.9	2291.4	2451.9	2430.7	2632.8	2954.8	2823.7
6. Financial Institutions and professions	1250.0	1702.3	1900.0	2217.5	2310.3	2469.8	2747.9	2787.1	3026.3	3167.8
7. Income from Dwellings.	576.6	715.9	771.6	853.6	984.4	1165.9	1238.4	1350.8	1458.4	1531.0
8. Government Services.	2138.1	2772.6	2931.1	2926.9	2972.8	3297.3	3496.0	3439.4	3839.6	4182.0
9. Domestic Income	24887.7	34582.6	31387.9	33711.3	35998.1	38226.5	39910.1	41593.7	43080.6	42272.0
10. Income from Abroad	- 143.5	-200.1	-181.3	-195.3	-208.6	-221.2	-249.2	-250.6	-245.7	-250.0
11. N.N.P. (At factor cost)	24744.2	34382.5	31206.6	33516.0	35789.5	38045.3	39550.9	41343.1	42834.9	42022.0
12. Indirect Taxes	2738.3	3826.1	3452.0	3714.9	3966.5	4213.4	4728.7	4779.0	4998.0	4998.0
13. N.N.P.(at market prices)	27482.5	38208.6	34658.6	37230.9	39756.0	42258.7	44339.6	46122.1	47832.9	47020.0
14. Depreciation	1008.5	1362.7	1304.5	1511.5	1625.4	1765.7	1891.7	2023.9	2108.3	3193.0
15. G.N.P.	28491.0	39571.3	36053.1	38742.4	41381.4	44024.4	46281.3	48146.0	49941.2	49213.0

Source: SPO. First Five-Year Development Plans, 1963-67, p.14, from Table 7.

produced in the various sectors of the economy.

The first six years of the period under study, that is the period 1948-1953 were those of comparative price stability, while next period (1954-1958) was marked by a gradually increasing inflation which was reflected in prices. Finally during the years 1959- and 1961 we observe the return of a comparative price stability (1).

The 1950-1953 period contains the years of rapid increase in agricultural production which was the result of the expansion in cultivated area, favourable weather, and good markets. (2) In the second period, however, when the limit of cultivated land was reached, bottlenecks began to appear, further strains led to inflation, and steadily growing deficit in the balance of payments and as a result, to a severe imbalance of the economy. Taking 1953 as a base year, the average annual increase during this period was only about 3 per cent. After 1958 Turkey enters a period of stagnation with approximately 2 to 2.5 per cent increase in National Income.

The National Income in terms of constant prices can help us to see the true picture of the country's economic growth. The figures for the NI at constant prices indicate that:

---

(1) This was due to 8th August 1958 stabilisation programme launched by the Government to cope with rising prices.

(2) First Five-Year Plan, p.12.

(i) National income has shown 38 per cent increase from 1950 to 1953 because of extension in the cultivated land accelerated by the mechanisation as well as good weather conditions. Following 1953, the rate of growth in National Income has dropped considerably accounted for by bad crops of 1954, and only in 1956 did it regain its 1953 level.

(ii) The National Income in 1961 rose by 76 per cent over 1948 and 17 per cent over 1956. It is striking to note that the National Income over 14 years, has not even doubled.

(iii) With the exclusion of 1961, the average rate of growth has been 5.4 over the second half of the 1950's. (1955-1960) See, Table 3. This rate is not high enough when the rate of population growth is 3 per cent and this latter rate has absorbed the real increase in the former. Therefore we think it is necessary to emphasise the effects of population on the National Income and the trend recorded in the per capita income.

Table 3, Rate of Income Growth.

Years.	Rate of Growth (per annum)
1954-55	7.4
1955-1956	6.7
1956-1957	6.3
1957-1958	4.2
1958-1959	4.2
1959-1960	3.6

Source: It is calculated from the figures in table 2.

### 3 - PER CAPITA INCOME.

Population growth constitutes one of the basic variables affecting the course of economic development. It has two-fold importance; as a consumption entity, the size and structure of population influences the rate and pattern of consumption; as an indispensable productive agent, it forms one of the main determinants of the levels of production.

The recent spectacular advances in medical sciences have largely contributed to the decrease in mortality rates in Turkey as it did in many underdeveloped countries.<sup>(1)</sup> In conjunction with a rising birth rate this led to a real "demographic explosion" in Turkey. The rate of population growth (3%) as we noted elsewhere has been one of the highest among under developed countries.

Not only size and rate of population, but the age composition as well, has great effect on the per capita income and material well-being.

According to H.W.Singer "the unfavourable age structure of the population, resulting from the joint action of high birth and mortality rates hampers more the development process than does the high rate of births, since it leads to a high proportion of children within the total population, of which only part reaches the productive age

---

(1) The rate of mortality is 15-17 per thousand, against 30-35 per thousand rate of birth. see. Prof. Akton,R, Turkiyede Nufusve Gida Yarisi, SBF Dergisi, No.1 Mart 1960.

and "pays back" to society by means of labour the social cost of their upbringing and education. The growth of population thus assumes a "wasteful" form.<sup>(1)</sup>

A glance at demographic data show that in many under developed countries children under 15 years form about 40 per cent of the population, while in developed countries the proportion of persons in the same age bracket varies from 20-30 per cent. In the age bracket from 15-64 years - the productive age - the situation is rather reversed: it constitutes 55-60 per cent of the population in the under developed countries, while in advanced countries it reaches up to 70 per cent.<sup>(2)</sup>

The demographic data for Turkey indicates that 40 per cent of Turkey's population are children under 15 years of age <sup>(3)</sup> This is quite a high rate compared with many developed countries of the world. A decline in birth rate is necessary to lower the proportion of children to raise the proportion of the active population. The importance of this point is in relation to investment resources and employment possibilities.

The per capita income for the period 1950-1960 is presented below.

---

(1) H.W.Singer, problems of Industrialisation in Under-developed Countries, pages 326-327.

(2) See, Sachs, I, pattern of public sector in Under developed Economies, 1964.

(3) See, First Five-Year Development plan, p.62.

What is the value of per capita criterion as an international device in comparison between many countries?

One must be aware of the fact that there are some shortcomings of this measure because of special difficulties in computation. For instance in many underdeveloped countries so much of production and consumption occurs outside the market economy and therefore they cannot be interpreted according to the usual principles of valuation and exchange. Services of the housewife may be excluded in estimating national income in developed countries, yet in underdeveloped countries if the wives sow, cultivate and harvest the entire food supply, exclusion of their services is almost absurd. Some other difficulties stem from the variation among countries in the range, scope and conception of government activities.

Because per capita income computations are the most frequently used indices, we shall confine ourselves to them in the proceeding analysis.

The per capita income has risen steadily from 1950 to 1953 with the rise in agricultural production which was due to extended areas of cultivation.<sup>(1)</sup> But in 1954, it declined by 11.6 per cent compared with the previous year. As a whole the per capita income has shown 24.3 per cent increase during 1950-1960 period which is much less than the rate of growth in the total income.

---

(1) See, First Five-Year Plan, p.12.

Table 4- Per Capita Income.

Years.	Per Capita Net National Product at 1961 factor price (T.Liras)	Index of per Capita increase in Income. 1950=100	Index of Increase in Total Income. 1950=100.
1950	1181	100	100
1951	1316	111	115
1952	1391	118	125
1953	1507	128	139
1954	1332	113	126
1955	1393	118	135
1956	1445	122	145
1957	1492	126	154
1958	1511	128	160
1959	1530	130	167
1960	1539	130	173
1961	1469	124	170

Source: First Five-Year Plan, p.15.

Per Capita income constitutes only \$ 185 and this is the lowest income of any European country. A comparison of this figure with other countries is presented below.

Table 5 - Per Capita GNP in \$ (1958-1959)

Turkey	185
U.S.A.	2717
W.Germany	1051
France	1178
U.K.	1236
Italy	601
Greece	355
Spain	300*
Portugal	219*

Source: First Five-Year Plan, p.27, Table 22.

\*These Figures are of 1960.

#### 4- Distribution of Income Between Urban and Rural Population

The distribution of the national income between urban and rural population is significant from the social welfare point of view. In Turkey the volume of economic activity, income levels and social services differ greatly from one region to another.

We must note that the statistics needed for this purpose are not adequate and what we have in hand are the figures up to 1955.

The annual income per head of the rural population in 1955 was 337 Turkish Liras while of the urban population was 975 liras which was almost treble the income of the former group. The discrepancy between income of urban and rural population has remained at the same level for a long time. During 1938-1955 income of the inhabitants of the rural areas has increased by 8 per cent compared with 17 per cent increase in the income of urban population. Therefore differences in welfare will be apparent if we take into account the number of inhabitants in the rural and urban areas. See, Table 6.

Table 6<sup>(a)</sup> - Distribution of National Income by Urban and Rural Population. (in T.Liras)

Years.	Per Capita Income by Rural Popul.	Rural Pop. as % of total Popul.	Per Capita Income by Urban population.	Urban Population as% of total population.
1938	312		830	
1948	312		825	
1950	290	78.3	862	21.7
1951	344		900	
1952	353		946	
1953	385		1014	
1954	304		971	
1955	337	74	975	2.6

Source: Chilloc. H.op.cit. P.116 and, Table, 1 in this study.

(a) We may add that we did not find any satisfactory explanation on the computation of incomes of both groups.

The income of rural population has varied from year to year because of dependence on agriculture and of fluctuations in the agricultural production. Further, low level productivity in agriculture, and almost 2 per cent growth of rural population per annum may have large effect on this trend.

### III.- NATIONAL INCOME BY SECTORS.

Although considerable progress has been achieved in the industrialisation during the past 15 years, the

following figures in Table 7, indicate that Turkey's economy still preserves its basically agricultural character. The data show the changing composition of the Turkish economy in terms of participation.

According to the 1960 figures, about 44 per cent of the National Income is derived from agriculture, as compared with 10.9 per cent from manufacturing and mining, 10.5 per cent from commerce, 9.7 per cent from public services, 7.9 per cent from transportation and communications, 5.9 per cent from construction industry, and 11.2 per cent from others.

Table 7 - Relative Importance of Production Sectors in the National Income (In terms of 1948 prices) percentage.

	1948	1954	1959	1960
Agriculture	53.2	44.9	44.9	43.9
Industry	10.5	12.0	10.7	10.9
Building Industry	3.2	5.7	6.0	5.9
Trade	10.9	9.7	10.4	10.5
Transportation & Communications.	4.6	7.3	7.5	7.9
Public Services	9.9	10.9	9.6	9.7

Source: National Income of Turkey, C.S.O. No.420.

## 1- AGRICULTURE.

The agricultural sector in which 75 per cent of our population is engaged, provides almost half of the National Income. But its share has fluctuated over the last ten years. The variations recorded in the agricultural output are considerably accounted for by weather conditions, particularly in the production of cereals and cotton, and the lack of substantial development in the field of intensive farming.

Farming is the dominant part of the agricultural sector, and provides the largest share in the national income, followed by forestry and fishing.

### Agricultural Production According to Sub-Sectors. (1960)

	Million T.L.	% of NI
Farming	18.710	41.7
Forestry	252	0.6
Fishing	130	0.3

Source: Cillov.H, Op.cit. P.122.

The cultivated land has increased by 55 per cent from 1950 to 1960, or in other words from 9.868 million hectare to 15,305 million hectare in the same period. As a percentage of total area the cultivated land has risen to 29 per cent by 1958 and remained at this level in the subsequent years.

The financial and technical assistance which came from abroad through Marshall plan in 1949, and tax favouritism, cheap credit and high cereal price supporting programme of the Government, played a noticeable part in the extension of cultivated land.

In the past the Turkish Government put major emphasis upon farm mechanisation and the number of tractors reached 35,000 by 1953.<sup>(1)</sup> Though only about 12 per cent of the 1952 cereal acreage was cultivated with tractors, mechanisation largely contributed to the tillage of a larger area of cropland. Also mechanisation helped to raise yields per acre, while a very small part of the increase was due to yield-raising practices (improved seed, fertilisers..)

It was estimated that of the 43 per cent increase in cereal production during 1943-1953, five sixths was due to increased area and only one-sixth to improved practices.<sup>(2)</sup> In the same period cotton production increased threefold and the acreage devoted to it doubled and its yield per acre increased by 25 per cent. A large part of this increased output resulted from the boom in cotton prices which the Korean War brought about. (The cotton prices doubled during 1950-51). Besides this, advanced

---

(1) See, Nicholls, W.H, Investment in Agriculture in Under-developed Countries; Turkey.AER, March-May 1955, p.62.

(2) Ibid.p.61. Cereal acreage rose by 7.4 million acres largely at the expense of poor quality grazing land.

mechanisation was a further incentive for increasing land devoted to cotton production.

The Government's Toprak Office was also supporting wheat prices at very high levels during 1952-1955 and the effects of this programme was further enhanced by doubling of the number of Government grain-buying stations. The Agricultural Bank of Turkey increased its public farm credit more than fourfold between 1948 and 1952. One-third of the direct loans were allocated for machinery and equipment purchases. (1)

In order to encourage agricultural activities (farming and fishing) agricultural income had not been subjected to income tax until 1962. This tax favouritism and the expansion in the road building programme helped to bring more farmers and land into the market economy.

---

(1) Ibid.pp, 61-62.

Table 8 - Cultivated Land in Turkey.

Years	Cultivated Land (000 ha)	Fallow (000 ha)	Total (000 ha)	Cultivated Land as % of Total Area
1944	8170	4814	12984	16.7
1950	9868	4674	14542	18.7
1951	10600	4672	15272	19.5
1952	11775	5586	17361	22.3
1953	13021	5791	18812	24.2
1954	13208	6408	19616	25.2
1955	14205	6793	20998	27.0
1956	14556	7897	22453	28.8
1957	14392	7769	22161	28.5
1958	14764	8.001	22765	29.2
1959	15020	7920	22940	29.5
1960	15305	7922	23264	29.9

Source: First Five-Year Plan, op.cit, p.24, Table 20

The share of major groups of products within the gross agricultural output is presented below. The largest contribution comes from livestock products (26.5%), followed by cereals (23.1%), and fruit and vegetables (19.7%). Animal feed and industrial crops give 15.1 and 10.6 per cent respectively.

Livestock products are not only the most important factor of Turkey's national income, but also they are directly connected with nutrition, health and the

satisfactory operation of agricultural and other sectors. In present conditions stockbreeding is not fully utilised and there is a vast potential for higher income than present.

Every year an average of 150,000 hectares of the pasture lands are estimated to have been cultivated to provide necessary cereals for the rising population. This grazing land which is prone to erosion and is unsuitable for cereal production must be returned to its previous state.

Table 9 - Composition of Agricultural Production (As percentage of the total Agricultural Production)

Group of Products.	1962.
Cereals	23.1
Pulses	2.0
Animal Feed	15.1
Fruit & Vegetables	19.7
Industrial Crops	10.6
Livestock Products.	26.5
Forestry Products	2.4
Fishery Products	0.6
TOTAL	100.0

Source: First Five-Year Plan, op.cit, p.132, Table 54.

The only field that is comparatively neglected is fishing. With a quite long coastline, numerous lakes and rivers and particularly with the Bosphorus which is an important passageway for fish, Turkey has vast opportunities for fishing. Yet fishery products in the total has remained very insignificant. The main problems related to this sub-sector are backward fishing methods and very weak marketing and shipping facilities, Furthermore, fishery products' share in the total exports has been rather small and this is due to complex export formalities which are unsuited to its nature and the lack of private capital invested in this field.

The total agricultural output has risen by 52 per cent (at 1961 factor cost) between 1950 and 1960. Yet the rate of increase has been 40 per cent between 1950 and 1953, as compared with 7.8 per cent from 1953 to 1960. See, Table 2A - 2B. A very high rate of increase in the former period was the result of the substantial extension in cultivated land which stemmed from mechanisation, price supporting programme and other factors. It is striking to see that the average rate of increase in the former period was 13 per cent per annum while in the latter period 1.1 per cent.

As can be seen from the agricultural production indices, soil products have shown considerable fluctuations from 1957 until 1960 but later in 1961 they dropped very

sharply. Until 1960 the highest increase had been in industrial crops compared with cereals and pulse crops (see, Table 10.) The reason for the poor agricultural yield in 1961 was bad weather.

Table 10 - Agricultural Production Indices (1948-1952 = 100)

	1957	1958	1959	1960	1961
General	157.7	167.9	162.7	174.5	150.3
Cereals	165.6	171.2	157.8	171.5	144.4
Pulse crops	131.5	152.0	154.1	161.7	146.2
Industrial crops	141.1	162.1	175.9	183.3	169.2

Source: Economic Report 1962, Union of Chambers of Commerce and commodity Exchange, Ankara, 1962, p.10.

The recent development in the agriculture can be summarised as follows: total agricultural output has increased from 22.689.5 liras in 1961 to 24.825.6 liras in 1963 which amounts to 9.4 per cent increase. Cereal production showed considerable increase in 1962 and 1963, while cash crops stood at the same level in 1961 and 1962 (3.680.3 T.liras), and dropped comparatively in 1963 due to the rains which delayed sowing and to certain diseases. (1)

During the period 1961-1963 the average rate of growth in the total agricultural output was 4.6 per cent per annum.

(1) First Five-Year Plan, Op.cit. pp-10-11 (1964 Annual programme, SPO. Ankara Dec, 1963)

The main and continuing problem is that agricultural productivity is low. The fundamental reasons for this are:

(i) excessive population in agriculture and uneven distribution of population among regions, (ii) poor land ownership, and fragmentation of holdings, (iii) advanced technology and means of production are not sufficiently widespread, and finally (iv) land is not used efficiently in the light of technical and economic requirements.

Active population in agriculture in 1961 was 9.800.000 compared with industry and services as 1.180.000 and 1.157.000 respectively.<sup>(1)</sup> It is clear that 77 per cent of the total active population is engaged in agriculture and a large proportion of this adds little or nothing to total output. The number of persons engaged in agriculture has increased over the last 16 years by 3.9 per cent per annum.<sup>(2)</sup>

A rapid population increase in the past and inadequate employment opportunities in agriculture and other sectors have brought forth a serious disguised unemployment in agriculture. It is estimated that at present, there are 1 million disguised unemployed in this sector even at the peak season.<sup>(3)</sup> As a result of this excess population and

---

(1) See, First Five-Year Plan, op.cit.p.398.

(2) OECD, Turkey, May 1963, paris, p.9.

(3) First Five-Year Plan - Op.cit.p.33.

unemployment (and concealed unemployment) the income of a very large percentage of the agricultural population is quite low. On the basis of 1961 prices the average income of the peasant is almost 950.T.liras while that of those employed in sectors other than agriculture is 2740.T.liras.(1) As can be observed from the above figures, the per capita income outside agriculture is approximately 3 times that of the peasant.

Another factor influencing productivity in agriculture is the fragmentation of land holdings and backward land ownership system. Land holdings over 500 acres constitute only 14 per cent of the total cultivated land, while the rest (86%) are in the form of small holdings.(2) Again farming units which are less than 100 decar account for 39.4 per cent of the total cultivated land.(2)

The small land holdings are the result of excess population in relation to the land farmed. This population pressure also stems from the unequal distribution of lands between agricultural population. Actually, one-fourth of the population in this sector possess three-fourths of the farming land, while the remainder is distributed among 75 per cent of farm families.(3) The distribution of land

---

(1) See, programme for the year 1962, For Transition into the Plan Period, (draft) SPO, Octob.1961, Ankara,p.111.

(2) See, Cilloc,H, Op.cit. pp 164-170. 1 acre = 4000 m<sup>2</sup>,  
1 decare= 1000 m<sup>2</sup> or 1/4th of an acre.

(3) Programme for the year 1962, op.cit.p.111

owned by the state has also resulted in further fragmentation of landholdings. Under the 1945 law, redistribution of land to landless farmers continued until 1958 and as a result these people received 1,437.000 hectares of Government cultivable land and 884.000 hectares of communal grazing land.<sup>(1)</sup>

These small lands were not distributed on the basis of creating large and economical units by forming co-operatives nor were they encouraged to do so.

As a conclusion one may say that land holdings have remained far from being in adequate size for the introduction of mechanisation, fertilisers and irrigation.

Many of Turkey's mechanised farms are well below the size necessary for efficient utilisation of machinery. Per capita income of agricultural population is very low, and the rapid increase of the agricultural population is causing the splitting up of the already small agricultural enterprises, making mechanisation rather difficult to exercise. The distribution of Turkey's tractors is very uneconomical for 43 per cent of the tractors were in regions whose mechanised farms averaged only 49-86 acres per tractor. The remainder of the tractors were in three regions with 165-496 acres per tractor.<sup>(2)</sup>

---

(1) The farmers benefited from this law stood at 312.698 by September 1958. U.N. World Economic Survey 1958k U.N. Economic Development in the Middle East 1957-58. Supplement to World EC. Survey 1958. The value of Government land is repaid over a period of 20 years, while communal grazing land is distributed freely.

(2) See, Nicholls, H. Op.cit. These figures are according to 1952 data.

The amount of fertilizers used has been very low both because natural fertilizers are mostly used for other purposes<sup>(1)</sup>, and because the prices of artificial fertilizers are high compared to crop prices. It is estimated that 100-200,000 tons of fertilizers are used annually. This amount is too low compared with the area sown and also with the amount used in other countries. The planners have found that 3-400,000 tons of fertilizers must be used annually so that the chemicals removed from the soil by crops and erosion can be restored.<sup>(2)</sup> Consumption of some of the fertilizers through years is given in the Table below.

Table-11 - Consumption of Fertilizers.

	(Thousand of Tons)				
	1954/55	1955/56	1956/57	1957/58 <sup>a</sup>	1958/59 <sup>b</sup>
Nitrogen (N)	9.5	6.4	10.8	14.0	16.7
Phosphoric acid (P <sub>2</sub> O <sub>5</sub> )	11.6	8.3	5.1	6.4	17.5
Potash (K <sub>2</sub> O)	0.6	0.6	6.1	0.3	11.1

Source: U.N. Economic Development in the Middle East.  
op.cit. p.12, a) estimates, b) forecasts.

There is a large difference in yield between dry and rainy years, and therefore it is very necessary to establish an irrigation network in farming. Of the 25 million hectares

(1) As a source of energy in the form of animal waste.

(2) See, programme for the year. 1962. op.cit. p.112.

cultivated today, only 4 per cent are irrigated. (Area under irrigation is estimated to be 1.115.000 hectares)<sup>(1)</sup>

Cotton forms 22.4 per cent of total irrigated area, followed by wheat as 17.9 per cent and by vegetables as 16.1 per cent.<sup>(2)</sup> (1962 figures).

No doubt there is a very sound reason to increase the area under irrigation in order to promote productivity of land, and therefore the benefits of this irrigation system must be demonstrated to all farmers to encourage them to build their own irrigation channels in their farms to utilize to capacity an irrigation network. Also convincing information in relation to fertilizers, plant and animal disease control must be provided. At present D.S.I. (State Hydraulic Works) is trying to bring 25-30.000 hectares per annum under irrigation but this is far from being adequate.

Another characteristic of the farming in Turkey is that the pattern of the crops is determined rather to meet the farmers' own need than the demand in the market. The land which could produce valuable crops is usually devoted to low-value crops. Despite the development in transportation in general the marketing systems still remain primitive,

---

(1) See, First Five-Year Plan, op.cit.p.155.

(2) First Five-Year Plan, op.cit. p.155.

and there is inadequate contact between production regions and markets. (1) Actually small land holders and landless farmers have not united as strongly as necessary in the forms of co-operatives to handle production and sales of agricultural output.

Finally, one can find that investible capital available to farmers has not been directed toward raising productivity. The credits of the Agricultural Bank are mostly given in small quantities and are allocated to consumption purposes rather than to agricultural expenditures.

As a result these available resources are not utilized. Moreover the terms of agricultural credits are quite discouraging because they are based on short-term.(2)

There is a large need for medium and long-term credits and also for combined loans for an agricultural operation instead of separate loans for each product.

## 2- INDUSTRY AND POWER.

Industry is the second largest sector of the economy after agriculture and its share in GNP was 16.8 per cent in 1962 with the inclusion of manufacturing, mining and energy. The largest contribution is made by manufacturing

---

(1) See, Program for the year 1962, op.cit.p.111

(2) For instance in 1959, 85 per cent of credits provided were short-term, against 9 per cent of medium and 6 per cent of long-term, see Ibid.p.113.

followed by mining and energy.

Manufacturing is most developed in the food, beverage, tobacco and textiles and clothing sectors followed by chemicals, basic metal products and non-metallic products.(1) Food, beverage and tobacco production stood at 7.517.7 million T.liras in 1962, while textile and clothing brought in 5.270.0 million liras. In the cement industry national self-sufficiency has been attained and as a result imports of cement has dropped while exports of it has started on a small scale. (the export of cement was 18.000 tons in 1959 and then it rose to 69.000 in 1960)

Mineral sources are substantial and coal and iron ore exist in quantities adequate enough to support a national iron and steel industry and chrome and copper have contributed sizeably to exports in past years. Other mineral sources include lignite, boracite, pyrites and manganese. Minerals are exploited by both the state and private enterprise. Yet the highest proportion of production is provided by the public sector. (75%)

Percentage share of Industry in GNP - 1962.

---

Manufacturing	12.8
Mining and Quarrying.	3.2
Energy.	0.8

---

Source: First Five-Year Plan, op.cit. p.125, from Table 53/1

---

(1) See, First Five-Year Plan, op.cit.p.185.

The share of energy in the National product has been comparatively small despite its considerable development in the last decade. Turkey's energy requirements are met from six main sources as coal, lignite, hydraulic energy, petroleum, firewood, and animal waste<sup>(1)</sup> All these resources are adequate to meet the country's needs, except in petroleum products. But Turkey has surprisingly progressed in oil exploration in very recent years. For example oil products rose from 369.9 thousand tons in 1961 to 2,849.9 thousand tons in 1962 which implies 670.4 per cent increase over 1961 level. Crude oil also increased by 34 per cent between the same years. See, Table 13.

The proportioning of these principal energy sources in meeting the country's total energy requirements is presented below.<sup>(2)</sup>

	<u>As % of Total Energy.</u>
Coal	22
Lignite	8
Petroleum products	11
Animal Waste	28
Firewood	30
Hydro Power.	1
	<hr style="width: 100%; border: 0.5px solid black; margin-bottom: 5px;"/> 100

---

(1) Program for the year 1962, op.cit. p.38.

(2) Ibid, p.39.

As a whole industrial output has shown a steady and rapid increase between 1950 and 1960 and particularly in 1960, when it almost doubled the 1950 level - 80 per cent increase. Yet industry's share in the national product remained nearly unchanged (between 16-17 per cent).

Since 1953 industrial production has been rising more rapidly than agricultural production. Against 7.8 per cent increase in the agricultural output between 1953-1960, industrial output has risen by 37 per cent. Following a drop in 1961, industrial production has shown a tendency to increase almost in all industrial sub-sectors. Important increases were recorded particularly in petroleum products, chemical fertilizers, paper cement in the first months of 1962.

Chrome production was 5-9 per cent higher in 1962 than in 1961. But because of export difficulties stocks of chrome accumulated and production in the first half of 1963 showed a considerable decrease compared with the earlier year. Coal production however has recorded a small increase while lignite showed a rise of 15.9 and 9.6 per cent in 1962 and 1963.

The production of iron and steel also showed a marked increase in 1963 compared with the previous years. Cement on the other hand has become sufficient to meet domestic demand of the country. Its production rose by

13.8 per cent in 1962 and 18.8 per cent in 1963. The increase in paper production has also continued until the First Five-Year Plan. Petroleum products in 1962 were up to six times their 1961 level due to the MERSIN refinery beginning to produce in 1962. As can be seen the highest increase has been in petroleum products and it is believed it will meet domestic demand in subsequent years. See, Table, 13.

The textile industry which is a characteristic of underdeveloped countries is especially prevalent in the private sector and enjoys greater development than other branches of industry even being able to export.

The actual capacity of the cotton mills has reached 554 million meters which is expected to go up to 645 million meters with the completion of new mills. 75 per cent of the cotton production is consumed by the country while the remaining 25 per cent is exported<sup>(1)</sup>. The high cost of production resulting from high prices of auxiliary materials, coal and electric power means Turkey cannot export the textiles products without a Government subvention. For this reason, a special fund was established at the Sumerbank (State E.C. Enterprise) by the allocation of 9 million T.Liras from the State Budget in order to fill the gap between the cost of production and world prices.<sup>(1)</sup>

---

(1) See, Economic Report 1962, op.cit. p.19.

Table-12 - Industrial Income at Constant Prices (1961 factor prices)

Million T.Liras.

	Industrial Income <sup>(a)</sup> M.T.Liras.	As % of N.I.
1950	4051.3	16.3
1951	4390.1	15.4
1952	4756.1	15.3
1953	5.238.0	15.2
1954	5486.9	17.5
1955	5.706.3	17.2
1956	6.078.3	16.9
1957	6.519.8	17.1
1958	6.976.0	17.5
1959	7.321.6	17.7
1960	7.302.0	17.0
1961	7.220.4	17.1

Source: Table 2b, in this study, and Five-Year Plan.p.14.

(a) Construction is not included.

Table 13 - Production of the Main Industrial Commodities (Thousand Tons)

	1961 Annual Production	1962 Annual Production	Rate of change in 1962 %	1962 First Five Months	1963 First Five Months	Rate of Change in the First 5 Months of 1963 %
Chrome	524.4	555.6	+5.9	135.5 <sup>(2)</sup>	69.4 <sup>(1)</sup>	-48.8
Coal	6,381.9	6,491.6	+1.7	2,125.6 <sup>(1)</sup>	2,194.3 <sup>(1)</sup>	+3.2 <sup>(1)</sup>
Lignite	3,653.3	4,234.8	+15.9	1,341.2 <sup>(1)</sup>	1,469.6 <sup>(1)</sup>	+9.6 <sup>(1)</sup>
Crude Oil.	440.7	592.0	+34.3	226.6	275.6	+21.6
Oil Products	369.9	2,849.9	+670.4	663.8	1,348.1	+103.1
Crude Iron & Pigs	235.5	222.0	-5.7	95.4	156.2	+63.7
Steel Ignots	282.4	241.9	-14.3	94.4	157.4	+66.7
Rolled Products & semi Manufactures (3)	498.9	424.4	-15.0	143.9	259.2	+30.1
Cement	2,035.9	2,316.5	+13.8	1,015.2 <sup>(2)</sup>	1,206.1 <sup>(3)</sup>	+18.8 <sup>(2)</sup>
Paper	76.5	97.0	+26.8	40.4	46.2	+14.4
Chemical Fertilizers	32.0	132.1	+312.8	44.7	113.4	+153.7
Cotton Cloth <sup>(3)</sup> (Mill Metres)	154.0	158.2	+2.7	62.4	65.9	+5.2
Wollen Cloth <sup>(3)</sup> ( " )	4.6	4.6	-	1.6	1.7	+6.2
Electricity (Mill. Kwh)	3,050.0	3,560.7	+16.7	1,670.1 <sup>(2)</sup>	1,878.2 <sup>(3)</sup>	+12.5 <sup>(2)</sup>

Source: 1964 Annual Program, SPO. Op.cit. P.12.

(1) First 4 months.

(2) First 6 months.

(3) Public Sector only.

To promote industrial development in the absence of an active entrepreneurial class and private capital, the state stepped into the field of production as long as 30 years ago. Impatience with the slow pace of economic development, the impact of the World Depression, and the receptivity of Turkish Officials to schemes involving government control induced the Government to embark upon a policy of industrialisation directly through the establishment of State Economic Enterprises.

Under the First Industrialisation plan some headways was made during the years 1934-1938 in the establishments of such basic industries as iron and steel, textile, cellulose and paper, chemicals and ceramics. The aim of the plan was to make Turkey self-sufficient in those branches of industry.

Etatism as an economic policy remained the Government's official policy until 1950 and encouragement of private enterprise and retreat from etatism began after 1950 with a new policy. Economic liberalism played a decisive role in creating an active business community

and other middle class elements. Actually private industry grew very rapidly after 1950. For instance in 1950 there were 2515 private manufacturing establishments using more than 10 horse-power and/or employing more than 10 workers. The number of such establishments rose to 4106 in 1955 and also Workers employed by then increased from 87.000 to 140.000.<sup>(1)</sup> Although the new Government eventually resumed the policy of heavy investments in the industry and other sectors, private investment was also encouraged. To this end in 1950 the Turkish Industrial Development Bank was established to provide additional funds to private industry.

The 1950 liberal economic policy has been a good stimulus to industrial activities by transforming merchants who increased their profits from trading in chrome and dried fruits during the II. World War, into industrial entrepreneurs.<sup>(2)</sup>

After a change in Government Policy the position of public investments declined between 1950 and 1953 but

---

(1) Monthly Bulletin of Statistics, C.S.O. No.42,43, Ankara.

(2) See, Kindleberger, C, Economic Development, McGraw Hill Book Co. 1958.p.36, and also, Alexander A.P. Industrial change, Vol.VIII, 1959, p.356. price level rose 4-5 times between 1938-1948 due to severe inflation. War-time conditions resulted in large profits.

increased again in subsequent years. See, Table 14, Foreign exchange shortage experienced after 1954 became the main limiting factor to the growth of private industry and to overall economy. Domestic prices rose very sharply (3 times its 1950 level) and the value of money fell substantially. This, of course, led to a further deterioration in the foreign exchange reserves. By 1955 several industries dependent upon imported raw materials and capital goods (also spare parts) had been forced to stop their operation. The hardest hit were woollen textiles, rubber processing, metal working, chemicals and plastics.<sup>(1)</sup> Under these conditions the private industrial activities dropped sharply while the preference in imports of raw materials and capital goods was given to the state economic enterprises.

Table 14 - Distribution of Gross Capital Formation by Type of Investors. (As % of Total - At current prices)

	1950	1952	1954
Private Sector	58	65	60
Public Enterprise	14	12	13
General Government	28	23	27

Source: Union of Chambers of Commerce & Industry, Problems of Industrialisation and Investment in Turkey,

Ankara 1957.

(1) Hanson.A.H. Public Enterprise & Economic Development, London, 1959.

At present Turkish industry has two major categories the private and state sectors. Almost 40 per cent of total industrial output is supplied by the state Economic Enterprises which are engaged in a wide range of mining and manufacturing activities.<sup>(1)</sup> The last 15 years have seen an important expansion of the productive capacity of the industrial enterprises, but this has been accompanied by considerable economic and financial disorder. Their profits have been very small in relation to their assets and most of their new investments (even replacement needs) have had to be financed through the General Budget or short-term bank credits.

The total employed industrially is 1.180 thousands of which the highest portion is engaged in manufacturing. Of the 850.000 people employed in manufacturing 64 per cent (550.000) work in establishments employing less than 10 persons.

Industry including mining, manufacturing and construction employs about 10 per cent (9.4.p.c.) of the total active population. Given 7.5 - 8 per cent rise in industrial output and 5 per cent rate of growth of employment, industry is unable to absorb the excess unemployed and underemployed in the agriculture. Therefore there is a great need for industrial expansion either by establishing

---

(1) First Five-Year Plan, Op.cit. pp 65/66.

new industries or by expanding the existant ones.

Active Population in Industry - 1961 (In Thousands)

Sub Sectors.	Active Population.
Manufacturing	850
Mining	70
Construction	260
<b>Total</b>	<b>1.180</b>

Source: First Five-Year Plan, op.cit.p.399

ELECTRIC POWER.

In Turkey unlike other European countries there is no nation-wide interconnected system. Regional generating started in 1948, but only some regions enjoy electrical facilities, such as North-West and Western Anatolia, and the Gukorova region. For example 73 per cent of the total electricity is consumed by North-West Anatolia and 3 per cent by the Gukurova region. Again Western Anatolia has a surfeit of energy and power while Eastern Anatolia suffers from an acute shortage. About 31 per cent of the total population (8.5 million) uses electricity. (1)

(1) See, program for the year 1962, op.cit.p.40. Excess energy in North West Anatolia is 443 million Kwh, and in Western Anatolia 339 Million Kwh. The energy need of the Gukurova region is estimated to be 45 million Kwh. *ibid.*p.43.

Also compared with other countries, at present Turkey has one of the lowest electrical energy consumptions. (about 107 Kwh. per head). The average per capita consumption of electricity in Europe is 1560 Kwh, and in neighbouring Greece 210 Kwh. (1)

The country's electrical requirements were for the most part met by thermo electric power generators until the regional systems were constructed. A considerable use of hydro-electric generators began in 1956 with the operation of the SEYHAN hydro-electric power plant.

Total generation has shown a rise of 82 per cent between 1955 and 1960 rising from 1.580 million Kwh to 2.886 million Kwh. This rose to over 3 million Kwh in 1961 and still higher in the first 6 months of 1962 and 1963.

As can be seen from the Table below, 61 per cent of the total electric energy in 1960 was used in industry while 22 per cent in private and public consumption and the residual in internal consumption. (in 1961 energy consumed by industry rose to 73.5 per cent)

---

(1) Economic Report 1962, Op.cit.p.22.

Turkey's consumption and generation of electricity are presented below.

Table 15 - Consumption and Generation of Electricity.  
(In Million Kwh.)

Years	Private Consumption	Public Buildings	Street Illuminations	Industry	Transport and Communications	Loss & Internal Consump.	Gross Generation.
1955	250	37	48	992	20	233	1580
1956	278	37	53	1142	34	275	1819
1957	319	50	57	1296	36	299	2057
1958	359	55	63	1446	39	342	2303
1959	407	60	70	1593	41	380	2587
1960	465	67	78	1778	49	456	2886

Source: Program for the Year. 1962. op.cit. P.41

It is estimated by the planners that the total energy and power capacity in 1960 were 4.867 million Kwh and 1260 MW respectively.<sup>(1)</sup> While the amount of energy and power consumed in the same year stood at 2.886 million Kwh and 650 MW, one can conclude that there is an unutilized excess. This excess is accounted for by a great lack of co-ordination and extensive confusion among electricity generating regions.

### 3- TRANSPORTATION.

The conditions of transportation in the first years of the Turkish Republic (1923) were poor. The length of one-way rails was approximately 4000 Km, and the commercial fleet was composed of old and relatively small ships. The ports were not sufficient in number, and the only ports existing at the time were Istanbul and Izmir. The highway networks were not appropriate for voluminous traffic and the difficulty of carrying bulky goods from production areas to markets led to very high transportation costs.

Yet this unfavourable situation was remedied after 1948 due to very high investment expenditures in this sector. Its share in the national income also increased from 4.6 per cent in 1948 to 7.9 in 1960. (see, Table 7.).

---

(1) Program for the Year. 1962. Op.cit.p.41.

In other words income derived from this sector showed a rise of 204 per cent in the same period.<sup>(1)</sup> The indices for various sectors also indicate that transportation has increased much faster than agriculture and industry.

Table-16- Indices of the National Income by Sectors (1948=100)

	1953	1956	1960
Agriculture	136.5	129.9	157.2
Industry	141.5	164.2	197.4
Transportation and Communications	171.4	235.9	327.6
National Income	143.7	149.4	190.6

Source: Cillov. H, op.cit. p.342.

Of the 189.766 active population in transportation and communications, 109.088 are engaged in highways, 33.259 in railways, 26.555 in sea, lakes and river, and the rest in communications, airways and other transportation.<sup>(2)</sup>

Land transport is in the hands of small private enterprises, railways and airways are all state enterprises. Maritime transport however is handled by both state and private enterprise.

(1) From 971.1 million T.Liras in 1948 to 2.954.8 million liras in 1960.

(2) These are 1955 figures. We did not have any recent data on active population in this sector.

The highest growth has been recorded in land transport. The share of land transport in the total in 1950 was 46 per cent for passengers and 17 per cent for freight, while these shares rose to 67 and 37 per cent respectively. <sup>(1)</sup>

Turkey in 1960, had a highway network of 62,000 km in the form of state highways and provincial roads. Over the last 10 years it has increased by 25 per cent, but this growth has been greater between 1951-55 than 1956-60. (An increase of 5.760 km in the former and 4.756 in the latter period) <sup>(2)</sup> Only about 42,039 km are all weather roads which means that 67 per cent of our highways can be used in unfavourable weather. <sup>(2)</sup> The rest of the highways (31.4%) which are paved and graded roads with or without bridges are not suitable for heavy traffic. The effect of this is that the areas of production and consumption have difficult contact with each other which results in large price differences.

Average highways per 1000 km. square and the per capita highways for various countries are given in the table below. As can be seen, in Turkey, average highways per 1000 km. square and highways per capita are 75 km. and 2,07 km respectively. <sup>(3)</sup> A comparison of this sort shows

---

(1) First Five-Year plan, Op.cit.p.344.

(2) Cillov.H. Op.cit.p.343.

(3) According to 1960 data.

just how inadequate the development has been with relation to general social and economic conditions.

While the main network is adequate to meet needs in the coming years this does not apply to secondary roads. (village roads)

Table 17 - Highways per 1000 km. Square and Per Capita.  
(in km)

	Per 1000 km sq.	Per Capita.
Turkey	75	2,07
W.Germany	1436	6,74
England	1344	6,11
Belgium	3048	10,22
Hungary	312	2,92

Source: Cillov. H, Op.cit. p.340.

The length of railways operating in 1961 was 7882 km, but because of high tonnage trucks, over loading, and increasing competition from the highways transport of freight and passengers previously handled by rail have shifted to road transport with its comparatively better prices, speed and less formalities.

	Length of Railways (km)		
	1956	1960	1961
Main Rails	7.804	7.895	7.882
Secondary Rails	154	154	154

Source: Cillov. H. Op.cit.

The railway network compared with those of other countries seem to be in an unsatisfactory position. i.e. railways per 1000 km square and 10.000 population<sup>(2)</sup> are 1.0 km and 2.8 km respectively. However taking into account actually utilized railway capacity which is estimated to be 20<sup>(1)</sup> per cent of the total, one may rightly conclude that railway networks in their present state are sufficient to meet the country's transportation needs. Yet it cannot be said that railways are established on sound economic bases to create external economies for further development.

Bearing in mind the 7216 km length of the coasts of Turkey, the importance of shipping is very obvious. The private sector plays an important role in shipping and owns about 65 per cent of Turkey's commercial fleet. The state commercial fleet are run by the MARITIME BANK which is also a Commercial Bank.

The largest part of the shipping is in the form of international transportation. In 1960 it (including privately owned vessels) amounted to 9410 billion ton-km of which only 810 billion ton-km was in coastal transportation.<sup>(3)</sup> However there has been a decline in sea

---

(1) The actual capacity in 1960 was only 15 billion gross ton-km against the total capacity of 73 billion gross ton-km. See Program for the Year. 1962.Op.cit.p.77

(2) These figures are 46; 23 in U.S.A. 130; 6,4 in U.K, 72; 4,6 in Italy and 13; 3,5 in Greece, See Darkot.B, Economic Geography of Turkey, Istanbul 1958,p.171

(3) Program for the Year 1962, Op.cit.p.79

transportation in recent years. (both in foreign and domestic lines) In the last 5 years the percentage of Turkey's foreign trade volume transported by Turkish ships fell from 40 per cent to 30 per cent.)<sup>1)</sup>

While there are sound reasons to expand commercial fleets operating in international lines, the same thing cannot be said for coastal lines which are operating with great losses due to their unused capacity. On the whole, only 30<sup>(2)</sup> per cent of the total capacity of sea transportation is utilised and this excess largely stems from coastal lines which are not properly organised and are composed of old ships which are below standard. The utility of capacity is closely related to the facilities for quick and safe loading and unloading in ports and quays, and many of the ports lack modern machinery and equipment to ensure this. Also harbours and ports are not closely linked with their hinterlands and therefore they are operating with excess capacity. They are run by various different organisations which also makes management inefficient. For instance İstanbul port is run both by the Maritime Bank and the Haydarpaşa Railways which result in a lot of mismanagement.

---

(1) Ibid. p. 79

(2) Economic Report 1962. Op.cit.p.22.

4 - COMMERCE.

This sector includes both wholesale and retail trade. With its share in the National Income as 10 per cent, commerce plays a fundamental role in the whole economy.

Turkey's foreign trade is important from the point of view of balance of payments difficulties which have hindered the country for nearly two decades. Its foreign trade constitutes a very small portion of the total World and European trade. In 1960 our share in the total world exports and imports was 0.3 and 0.4 per cent respectively.<sup>(1)</sup> Over the last 15 years despite a rapid increase in the World trade, the volume of Turkey's exports and imports have shown a very small increase.

Per capita exports and imports as \$12 and \$18, it is needless to say that these figures are very low compared with other European Countries.

---

(1) See, Cillov.H. Op.cit.

Table 18 - Per Capita Exports and Imports of Various Countries.  
In (£)

	Per Capita Exports.	Per Capita Imports.
Turkey	12	18
W.Germany	214	190
Italy	76	96
France	150	138
Greece	24	83

Source: Cillov. H. Op.cit.p & OECD General Statistics, Paris 1962

This low level per capita exports and imports however cannot only be attributed to slow rate of growth of foreign trade but also to the rate of population growth. Per capita foreign trade by itself may not be the right measure for the country's foreign trade position. Therefore the relationship between foreign trade and national income must be sought as well. According to 1960 data the share of exports and imports in the national income was 4.92 and 7.18 per cent respectively. See Table 19. Exports which was 7 per cent of the national income in 1950 dropped to 5 per cent in 1960. Actually the rate of growth of exports was less than the growth of national income. This may be due to dependence on foreign markets as well as on weather conditions which has large effects on the production of exportable goods.

Imports on the other hand, rose to 10 & 11 percent in 1953-1954 respectively due to a very liberal course adopted at the time, but in 1960 it dropped to 7 percent which was accounted for by import restrictions during the period 1958-1961. On 4th August 1958 a stabilisation programme was adopted to deal with the bottlenecks in both domestic and foreign trade. Turkey's large trade deficit and the increasing disparity between domestic and foreign prices led the Government to intensify restriction on imports and to stimulate exports through modifications of the existing multiple exchange rate system, premiums and surcharges, and through stricter control on prices of imported goods.

Table 19- The Ratio of Exports and Imports to the Gross National Income (at constant prices - as percentages)

Years.	Exports as% of the N.I.	Imports as % of the N.I.	Difference
1948	5.47	7.65	- 2.18
1950	7.09	7.69	- 0.60
1953	7.67	10.31	- 2.64
1954	7.13	10.19	- 2.06
1955	6.20	9.85	- 3.65
1956	5.65	7.55	- 1.90
1957	6.02	6.92	- 0.90
1958	4.10	5.22	- 1.12
1959	5.64	7.50	- 1.86
1960	4.92	7.18	- 2.26

Source: Prof.B. Ustunel, *Ihracatimizi, Arttirabilmek igin Milletler Arasi Antlasmalardan Faydalanma imkanlari, Ihracati Arthirma Semineri, Ankara, 1961, p.43.*

In Turkey exports and imports as percentage of gross national income are rather low compared with other countries. However the level of foreign trade is particularly affected by weather conditions and foreign elasticity of demand for our exports goods on the export side and external credit possibilities on the import side.

Table 20 - Exports and Imports as percentage of Gross National Income in various Countries. - 1960.

Countries.	Imports as% of National Income	Exports as % of National Income
W. Germany	19	21
Austria	29	25
Denmark	36	30
Holland	56	43
Greece	22	9
Turkey	7.18	4.92

Source: Prof. B. Üstünel, Avrupa Müsterek Pazarinin Türk Ekonomisi Üzerindeki Muhtemel Tepkileri, Türkiye Odalari Birligi Nesriyati, Ankara, 1962, p.28

Imports in recent years have consisted of equipment goods (including spare parts) and raw materials. Each category represented 44 per cent of total imports in 1960-1962, while consumer goods represented 12 percent of imports. <sup>(1)</sup> The relation of imports either to national

(1) Economic surveys by the OECO. Turkey, May 1963, Paris, p.11.

product or investment has varied substantially during the last decade. Over the period as a whole marginal propensity to import has been very high, calculated to be 1.45.<sup>(1)</sup> This rate indicates that imports have risen pari passu with the national income.

Exports on the other hand have shown almost no growth over the last decade and it is clear that this phenomenon lies at the heart of the balance of payments problem. Over 70 per cent of exports consist of agricultural commodities such as tobacco, fruits and vegetables and so on. The rest includes industrial and mining products. While international demand for the former agricultural products is increasing very slowly and is very inelastic in response to price, prices of the latter have developed unfavourably since 1952. The breakdown of our exports by producing sectors is shown in Table 26.

---

(1) The marginal propensity to import in the period 1950-1961 is found to be 1.46.

Table 21 - Breakdown of Exports by Producing Sectors.

	1960		1961		1962	
	Mill. \$	%	Mill. \$	%	Mill. \$	%
1- Agricultural products.	237.9	74.2	274.1	79.1	296.1	77.7
a) Cereals, pulses and other goods crops	14.5	4.5	14.7	4.3	6.6	1.7
b) Fruits & Vegetables	78.6	24.5	73.3	21.1	91.8	24.1
c) Industrial crops and forestry products.	119.0	37.1	150.5	43.4	163.5	42.9
d) Livestock, hunting & fishery products	25.8	8.1	35.6	10.3	34.2	9.0
II - Mining & Quarrying prod.	19.7	6.2	18.6	5.3	16.5	4.3
III - Industrial products.	63.1	19.6	54.0	15.6	68.6	18.0
<b>TOTAL</b>	<b>320.7</b>	<b>100.0</b>	<b>346.7</b>	<b>100.0</b>	<b>381.2</b>	<b>100.0</b>

Source: SPO. Development plan, First Five-Year 1963-67, 1964 Annual program, Dec. 1963, Ankara, p.228.

In addition to trade deficit Turkey is suffering from the deficit in invisible items due to heavy interest payments for foreign debts. The net deficit of invisible items including interest payments, was nearly 50-60 million dollars<sup>(1)</sup>, while the outstanding debt payable in foreign currencies in 1961<sup>(2)</sup> stood at \$ 950 million which makes Turkey's balance of payments tremendously difficult.

(1) SPO. Development plan, 1964, Annual program, op.cit.p.229

(2) See, OECD, Turkey, op.cit.p.11.

## 5 - OTHER SECTORS.

As can be seen from Table 8, share of the building industry in the national income has risen by 84 per cent from 3.2 per cent in 1948 to 5.9 per cent in 1960. Its share even exceeded 6 per cent after 1954 because inflationary conditions prevailed in the economy as a result of deficit financing. Inflation which caused lack of confidence in the value of money brought an upward trend in the building activities, until 1958. After 1958 there was a sudden drop in the volume of construction owing to the stabilisation Programme aimed at increasing the value of money and ending the inflationist policy. But the comparative slowing down of these activities in 1960 and 1961 may be attributed to the tendency to favour liquid assets.<sup>(1)</sup> The development of the building industry can be seen from indices for newly licenced buildings.

Table 22 - Indices for Licensed Buildings.

Years	Construction Indices.
1956	100.00
1957	102.84
1958	118.38
1959	101.18
1960	101.90
1961	103.11

Source: Economic Report 1962. Op. cit. p.25.

(1) Economic Report 1962, Op. cit. p.25.

The share of dwellings in the national income has almost doubled increasing from 2.7 in 1948 to 4.3 in 1960. According to data of State Planning Organisation in 1960 there were about 4.5 million dwellings in the country of which 3 million were in villages and 1.5 million in towns. With the 3 per cent annual population growth Turkey needs 150.000 new buildings each year. (1)

The participation of other sectors (public services, Finance, services and professions) in the national income have not shown any significant change over the last decade.

---

(1) Ibid. pp. 26/27.

CHAPTER II

HISTORY OF ECONOMIC PLANNING.

IN TURKEY.

## I - INTRODUCTION.

In this chapter we shall study the first economic planning attempts of the country, which started with the adoption of statist economic policy in the 1930's, and which accounted for several reasons. These attempts, which aimed at industrialisation, resulted in the First and Second Five-Year Industrialisation plans which are considered now, to have created the key basic industries in the country.

After the foundation of the New Turkish Republic in 1923, there was a great necessity for industrialisation efforts to change the structure of the economy. Turkey was of agricultural character and did not have any manufactured goods for exports except carpets during the period 1923-25.<sup>(1)</sup> Almost the whole manufactures goods the country needed were provided from abroad. Even main consumer goods like sugar, grained wheat, textiles and paper were imported from outside. In 1927, manufactures and semi-manufactures (187 million liras), constituted 90 per cent of the total imports of which 70 per cent was of consumer and 30 per cent of producer goods.<sup>(2)</sup>

The share of agriculture in the national income was extremely high with 67 per cent in 1927, while industry's share was 10 per cent, which forced the country to rely always on the outside world. (See Table 1.)

---

(1) See, Cillov. H. op.cit, p.244.

(2) Ibid. P.244.

Table 1 - Share of Agriculture, Industry and Services in National Income.

	1927	1938	1948
Agriculture	67	48	53
Industry	10	16	14
Services	23	36	33
N. Income	100	100	100

Source: SPO, First Five-Year Development plan, p.9. From Table 4.

The first attempt at industrialisation began when the government put into effect the law for the Assistance of Industry in 1927.<sup>(1)</sup> This was followed by a new tariff policy which was aimed at protecting domestic industries against foreign industries. However, the established industries were confined to small scale industries because of two main reasons: First, income of the population and standard of living were too low, and consequently domestic savings were limited and thus there was not sufficient capital for creating basic industries. Second, because domestic market was so small and narrow the small capital holders preferred trade activities to the investments in modern industries which could only be profitable in the long-run.<sup>(2)</sup>

(1) See, Tesviki Sanayi Kanunu, No.1058, 1927. This Law was abolished in 1942. Turkiyede Sanayi Sayimlari, Iktisat F. Mecmuasi cilt 3, No. 1-4 p.12.

(2) Cillov. H. Op.cit. p.245.

The 1930 World Depression made things worse when prices of agricultural products fell considerably and severe import restrictions were imposed due to an extreme fall in its exports. Therefore Turkey was forced to produce its own sugar, cotton and wool manufactures and others which it used to import from abroad.

These factors we just briefly pointed out will be discussed broadly in the subsequent sections of the chapter.

## II - THE EMERGENCE OF ETATISM AND ITS NATURE.

When Turkey gained its independence in 1923, it possessed large natural resources, but it was lacking domestic and foreign capital, skilled labour and entrepreneurs. The state was extremely worried by the disappointing development of the private enterprise in the areas of industry, commerce and services. Actually the private sector was short of capital and skilled entrepreneurs to embark on basic industrial establishments. This deficiency combined with the harmful effects of the World Depression on the agricultural products which constituted the main source of income of the country and the largest share of exports, led the government to intervene into the economic sphere on a large scale. In addition to these, the influence of the Soviet Union on the industrialisation and economic planning was apparent which has caused a wide controversy until today. The economic policy which emerged as

Etatism had become the philosophy of the Government until 1950 when it gave way to liberalism.

Let us now examine each of these factors in turn which compelled the country to follow an etatist economic policy instead of a liberal one.

1. In the early years of the Republic great efforts were made to encourage private activities and improve the standard of entrepreneurs in the field of industry and agriculture. The Government incentives in industry were enforced by a law containing these measures.<sup>(1)</sup>

(i) the state organisations gave preference to home industrial products and also price reductions in supplying these industries, (ii) private enterprise was exempted from the land tax and duties on raw materials, building materials and mechanical equipment, (iii) private industry received 30 per cent freight reduction on the railways, and free sites for establishing industries.

Yet these measures which were adopted did not realise the expectations of the Government which had anticipated a much quicker tempo of industrialisation. This policy resulted in a failure because private enterprise was inefficient and too weak to bring about an industrial growth.

---

(1) The Law for the Assistance of Industry in 1927. Also, see Hanson, A.H. Op.cit. p.118.

They were either unwilling to undertake basic industrial projects or if they were willing the products were not the right kind despite the encouragement they had received from the Government.

2 - The World Depression which occurred in 1929-30 was very harmful to underdeveloped, as much as to advanced countries. The main effect of the depression in Turkey was the fall in prices of agricultural products which brought up an agrarian crisis. This had emphasised the need for an industrial development and for less dependence on foreign countries.

In 1929 the trade deficit amounted to 101 million liras, with imports at 256 million and exports at 155 million liras. <sup>(1)</sup> As a measure to counteract this deficit the government imposed restrictions on imports by quota system and controlled the foreign exchange. The main objective of the new Tariff policy in 1929 was defined as "the protection of local industry". While it was clear that there was no possibility of expanding exports because of the low ebb in the international commodities market and falling prices, Turkey adopted import restrictions and protective barriers.

---

(1) See, Hershlag. Z.Y. Turkey - An Economy in Transition, The Hague. 1958.p

As a result trade balance was restored and domestic industry was protected. But countries discriminated against by Turkey in the export of some of her commodities were unwilling to come forward with more vital capital goods which were largely necessary for industrialisation in Turkey. With the lack of a flexible foreign trade policy Turkey not only panicked with the First wave of the depression and also failed to seize the opportunity for cheap imports and capital goods, which would have been very useful for industrialisation efforts.<sup>(1)</sup>

However one cannot ignore the fact that Turkey had neither capital resources or foreign credit facilities available to benefit from the World Depression.

The economic and social problems which followed the depression gave a sound reason for state intervention where private enterprise and capital either could not or was unwilling, to play its part.

Turkey as an economically poor country with inadequate capital funds was unable to increase capital formation unless it was at the expense of the level of consumption. This was the only way open to Turkey, given the absence of modern methods for providing foreign aid and

---

(1) Hershlag. op.cit.

technical assistance from other advanced countries. There was a firm belief in the country that a planned allocation of resources to speed industrialisation could only be achieved by the state.

3 - Despite a divergence of opinion as to the exact nature and extent of Russian influence on the development policies, Turkey received substantial economic aids from Russia for establishing basic industries.

Following a treaty of friendship which was signed with Russia in 1921, and the supply of arms to the Turkish National Army during the War of Independence, they both drew closer together. This relation was extended to the economic field where in 1934 Turkey received an interest free loan of \$3,000,000 for a period of 20 years.<sup>(1)</sup> This large amount of aid was in the form of machinery and equipment, left to the choice of the government. The repayment of that loan was to be paid by exports to Soviet Russia and it was also agreed that the prices of these goods would be fixed from time to time according to World prices.

The Soviet loan helped Turkey to establish a textile mill in Kayseri and two additional sugar factories. In April 1935 the trade relations with Russia increased and

---

(1) See, Hershlag. Z.Y. op.cit. p.79.

this resulted in the establishment of another textile mill plant in Nazilli, which was a project included in the First Five-Year Industrialisation plan.<sup>(1)</sup>

Turkey in addition to these influences, followed the Russian pattern for nationalisation of the industrial and mining establishments, particularly the ones which were in the hands of foreign enterprises. These were railways, coal mining enterprise in Zonguldae, electric and water supply and telephone and communications.<sup>(2)</sup> At that time the question arose why the state should not take the country's economic resources into its own hands, in order to develop them in accordance with a well-defined plan as in Soviet Russia. Nobody in the country believed any longer that the development of industry and the economy as a whole would be achieved without direct government control of national assets.

Did the Turkish Economic system have similarities to the Russian System? We believe Turkey differed widely from the Russian Collectivist system in many aspects:

a) - While Turkey remained very loyal to the principle of private enterprise and ownership, and did not resort to expropriations without compensation by the state,

---

(1) Hershlag. Z.Y, op.cit. In both industries it was benefited largely from Russian planners and technicians.

(2) See, Hershlag. Z.Y. op.cit.

one could hardly argue that Turkey was broadly imposed by the Collectivist R gime of Soviet Russia where all means of production were nationalised. (b) There was a striking difference in respect of agriculture too. Both countries were mainly of agrarian character and had a backward and ignorant peasant class. Though this structure was common to both Soviet Russia and Turkey they followed completely different ways. Russia at the beginning undertook impressive land distribution and later resorted to collectivisation, while Turkey did not go further than some minor measures and limited reforms. c) Also Turkey's state intervention and planning covered only the industrial part of the economy, entering merely those fields where private enterprise had failed, and was unable to undertake large industrial projects.

Therefore we may conclude that despite the co-operation and financial and technical aid obtained from Russia during the transition into etatism, and while the First Five-Year Industrialisation plan was carried out, Turkey was merely encouraged to pursue etatist economic policy by the success of Russian central planning experience.

What is then the character of Turkish Etatism?

The nature of etatist policy was well explained by President K. Ataturk on April 20th, 1931 as follows: <sup>(1)</sup> "Although considering private enterprise as a basic idea, it is one

---

(1) The programme of the Republican people's party, 1st article. See. N. Serin, Turkeyeni<sup>n</sup> Sanayilesmesi, SBF Yayinlari, No.167-149 Ankara 1963.

of our main principles to interest the state in matters where the general and vital interest of the nation are in question, especially in the economic field, in order to lead the nation and country to prosperity in as short a time as possible.

The scope of intervention by the State was defined as public works, education and instruction, public hygiene, social work and economic issues in the sphere of industry, agriculture and commerce.<sup>(1)</sup> The state activities in the economic field included mines, forests, canals, railways, shipping and gas and electricity.<sup>(1)</sup>

The etatism in Turkey was quite distinct from socialism or collectivism. This point again was made clear by defining its character.<sup>(2)</sup> "Turkish etatism is not a system which borrows ideas that have constantly been harped on by socialist theoreticians in the 19th century; it is a system peculiar to Turkey which has evolved from the principle of the private activity of the individual, but places on the state responsibility for the national economy with consideration of the needs of a great nation and a large country, and of many things that have not been done so far."

---

(1) Programme of the Republican party - Third congress, May, 1931.

(2) İktisat Vekaleti, Sanayi Tetkik Heyeti, 2.ci Yillik plan. Ankara 1936, p.30-31.

As can be concluded from both statements, the activities of private enterprises were not rejected and the government at that period tried to give encouragement to ensure their growth as well. It was thought that the nationalisation of key industries would give considerable stimulus to private initiative and capital.<sup>(1)</sup> In the proposals for the second Five-Year plan it was also stated that "....., the principles based on etatism in the economic policy as implemented by us are: to act and to activate. Private enterprise and capital are included within the framework of activation."<sup>(2)</sup>

Though the government did not deny the growth of the private sector, where profit incentives were preferred to general interests, it was rather cautious. This was due to the last experience in which both private and foreign enterprises concentrated on lucrative parts of the economy against those fields which were most vital to the overall economic development.<sup>(3)</sup>

### III - THE INDUSTRIALISATION PROGRAMMES.

As we have seen, the economic policy of Turkey was directed toward etatism since 1930, and in order to give momentum to economic growth the state aimed at the

---

(1) Prime Minister Inonu's speech in 1933, (quoted from A.H. Hanson. op.cit.

(2) 2 ci 5 yillik Sanayi Planı, 1936, p.22.

(3) See, Hershlag. Z.Y op.cit.

construction of heavy industry, including main war materials, large mines (iron and steel and the coal industry and a large degree of irrigation and land reclamation and also electricity and water supply industries.

The first and second Five-Year Industrialisation plans were the first expression of the etatist economic policy of the Government for establishing key industries in consumer goods and mining and electricity. The main principles of the planning era which began after 1930, were the preference for industrialisation over other fields, and the dominant role of the state as entrepreneur in establishing main industries. Both of the plans were executed and controlled by the government's financial institutions and agencies.

#### A- THE FIRST FIVE-YEAR INDUSTRIALISATION PLAN - 1934-1938.

The First Five-Year plan which was drawn up in 1933 was approved by the Government in January 1934, and its execution began in May 1934.<sup>(1)</sup> For its implementation the Sumerbank, a state enterprise was created with some other agencies with planning, financing and managerial functions.

According to the First Five-Year Industrialisation plan it was decided to establish 20 plants in 9 separate fields.<sup>(2)</sup>

---

(1) See. Dr.Serin.N. Turkiyeniu Sanayilesmesi, SBF Yayinlari, Ankara, 1963.

(2) T.C. Iktisat Vekaleti Sanayi Tetkik Heyeti, 2 ci.5 Yillik Sanayi Planı, 1936, p.17-19. Also Hershlag.op.cit.

(I) Chemical industry: a) Artificial silk (Gemlik),  
 b) Semicoke (Zonguldak), c) Attar of Rosses (Isparta)  
 d) Sulphuric acid (Izmit), e) Superphosphates (Izmit)  
 f) Chlorine and caustic soda (Izmit)

(II) Iron industry (Karabük)

(III) Earthenware industry: a) ceramics, b) glass  
 and bottles (pasabahce - Istanbul) c) cement industry.

(IV) paper and cellulose (Izmit)

(V) Sulphur industry (Kesiborlu)

(VI) Cotton textiles industry (Bakirköy, Kayseri,  
 Eregli, Nazilli and Malatyo for yarn and cotton fabric,  
 Igdir for yarn)

(VII) Sponge industry (Bodrum)

(VIII) Worsted industry (Merinos, Brusa)

(IX) Hemp industry (Kastomonu)

The sugar industry which was the most important  
 industry was not included in the plan, but it continued to  
 develop with other industries.

As it can be seen from the programme the state  
 first, tended to establish the basic industries the raw  
 materials of which were found in the country in agriculture  
 as well as in mining. It also extended the development of  
 the textile industry (which was the most characteristic  
 industry in many underdeveloped countries) in order to meet  
 the domestic demand, save foreign exchange and eventually

export.<sup>(1)</sup> Moreover, the government wanted to disperse industrial centres for strategic as well as social and economic considerations. i.e. bringing industry to the agricultural sector, providing alternative employment for farmers and locating production close to raw materials.

However in the question of location of industry there were some defects and the most important one concerned the Iron and Steel Works in Karabük which is 100 Km away from any coal source and 650 Km from iron ore deposits in Divrik. One reason for such wrong location was the importance given to strategic-military considerations. Secondly it was thought that the Iron and Steel plant in Karabük would operate largely with imported iron, because at that time the value of iron deposits at Divrik was underestimated or unknown.<sup>(2)</sup> This irrational choice of location resulted in high cost of iron and steel products owing to high transportation costs.

Also a similar mistake was made in the location of the cement industry because the long-term prospect was rather ignored at that time. Though the cement industry was established where their raw materials were plentiful and cheap, and sea transportation was easily available,

---

(1) See, The programme of the people's Republican Party.1935.

(2) See, SERIN, N, op.cit. p.174

(Istanbul Region) in later periods it was found<sup>(1)</sup> that their location had been irrational due to a switch of the consumption area from Istanbul and the Marmara regions to Anatolia. Following the war of Independence and the World Depression in 1930 the construction activities in Ankara and the Anatolia region had risen enormously and as a result the cement industry in Istanbul became isolated from the consumption centres.

Despite these location defects which were due to inadequate research on the demand and supply side of the economy, the First Five-Year plan had been quite successful in giving particular emphasis to the production of consumer goods and in some cases to promote the production of capital goods. Another characteristic of the plan is that it mostly included the industrial projects which the country was able to finance itself.

#### 1 - INVESTMENTS AND THE IMPLEMENTATION OF THE FIRST PLAN.

The financing of the First Five-Year plan was largely met by taxation, domestic borrowing and the credit of the state banks. Also in 1934 Turkey received a Russian loan worth \$ 8.000.000 dollars and in 1938 an English loan of £13.000.000.<sup>(2)</sup> In the plan period state investments

(1) See, Koklu, A, Gimento Sanayiimiade Gon Gelismeler, SBF Dergisi, Haziran 1954, p.25.

(2) See, Hershlag Z.Y, Op.cit. The aid from Russia was spent on textile plants, while the English loan was devoted to Karabuk Iron and Steel Industry.

reached the level of 135 million liras. <sup>(1)</sup> Also 10 per cent of the budget each year was devoted to industrial investment.

However we have no adequate data on how these financial resources were distributed among sectors and sub-sectors, and in each planned year. What we have in hand is the investment in manufacturing industry (including machines, equipment and buildings) during the period 1932-1941 which presents some idea about the trend recorded in the industry. Table, 2.

Table 2 - Investments in Manufacturing Industry, 1932-1941  
(Million Turkish Liras)

Years	Machine and Equipment	Buildings	Total.
1932	55.9	61.7	117.6
1933	63.3	46.9	110.2
1934	67.7	50.8	118.5
1935	70.1	56.7	126.8
1936	75.7	48.8	124.5
1937	82.1	52.1	134.2
1938	89.7	59.1	148.8
1939	103.5	64.0	167.5
1940	130.4	83.2	113.6
1941	124.0	89.3	213.3

Source: Tokin, I.H. Iktisadi ve Ictimai Turkiye, Rakamlarla Turkiyede Sanayi, IGM, Ankara 1946.p.49-50. And Dr.N. Serin. op.cit.

(1) See, Dr. Cillov. H. op.cit. p.133.

As can be seen from Table 2, total investments in manufacturing industries increased by 35 per cent from 110.2 million Liras in 1933 to 148.8 million Liras in 1938, which was largely due to the increase in investments in machinery and equipment. Investments in machinery and equipment in the same period rose by 41 per cent which amounts to 8 per cent per annum.

Similarly the energy-power consumption of large and medium industries rose by 80 per cent between 1934 and 1938, which is a rather high rate which might be considered a clue for industrial growth. The power per worker and per plant increased from 1.9 horse-power in 1934 to 2.4 horse power in 1938, while the latter increased from 104.2 horse-power in 1934 to 223.1 horse-power in 1938 which means more than a doubling of capacity. See, Table,3.

The large increase in power consumption per plant between 1934 and 1939 was due to large industrial enterprises undertaken by the state.<sup>(1)</sup>

---

(1) Dr. N. Serin.op.cit.

Table 3 - Power Consumption ( Horse Power)

Years	Total Power Consumption (HP)	Power per Worker	Power per Plant
1927 (a)	163.548	2.2	58.0
1932	102.670	1.8	70.0
1934	136.578	1.9	104.2
1938	246.082	2.4	223.1
1939	291.946	2.6	255.2
1950	423.052	2.6	161.5

Source: Tokin, I.H.op.cit. IGM, Aylik Istatistik Bulteni

(a) It is assumed that total energy in 1927 was used by large and medium industries.

At the end of the plan period, almost all of the industries had been completed with the exception of sulphuric acid (Izmit) and Chlorium factory (Karabük) (1) Some other complementary industries which were not included in the plan were also established in order to provide secondary raw materials for the main industries. They also began to run at the same time with the basic industries.

## II - INDUSTRIAL PRODUCTION.

Production in industry had recorded a substantial increase during the plan period as compared to earlier years. As it is presented in Table 4, total sugar production in 1928 was around 4,300 ton due to two sugar plants established

(1) Tokin, I.H. op.cit. p.4, And, Hershlag, Z-Y.op.cit.

in 1926, but production later rose to 42.500 ton in 1938. Cement production also had increased from 104.000 ton in 1928 to 288.000 ton in 1938 which represents a rise of more than double. In 1938 the number of cement enterprises rose to 4 and production capacity amounted to 315.000 tons which met 98 per cent of the domestic demand.<sup>(1)</sup> The paper industry had developed considerably and its production amounted to 9.100 ton in 1938 compared with 1.000 ton at the beginning of the plan. The cotton yarn industry which was one of the most important projects of the industrialisation plan showed a noticeable progress rising by 100 per cent between 1933 and 1938. (9.100 ton in 1933 and 19.700 ton in 1938). Coke production grew 4 times between 1928 and 1939. There was also a high rise in the production of tobacco, cotton and wool cloth products, toward the end of the plan period.

The completion and opening of the Karabuk Iron and Steel Industry in 1939 created a large base for heavy industry in the economy.

Industrial production index calculated for the period 1931-1939 indicates that production rose from 38 to 100 (on the base of 1939=100) which amounts to 163 per cent

---

(1) See, Ozeken A.A., *Turkiyede Cimento Sanayii*, IUIF. Yayinlari, Istanbul, 1942, p.60-61.

(2) Vedat Eldem, *Milli Gelir*, Iktisat Fakultesi Mec. ciltix, sayi 1-2, p.94.

rise over eight years. From these figures one might conclude that on average industry had grown by 20 per cent per annum in the same period.

Table 4 - INDUSTRIAL PRODUCTION 1928-1938-1946  
(In Thousand Tons)

	1928	1938	1946
Sugar	4.3 <sup>b</sup>	42.5 <sup>c</sup>	96.6
Olive Oil	36.0 c	34.0	28.0
Tobacco	-	13.7 (a)	2.8 (b)
Cigarettes	-	-	14.9 (b)
Cotton Yarn	9.1 (d)	19.7	31.7
Cotton Cloth (Million) (metres ) <sup>e</sup>	-	36.4	86.7
Wool yarn	-	4.7	6.6
Wollen cloth (million) (metres ) <sup>f</sup>	-	1.9	8.3 (g)
Raw paper	1.0 (h)	8.0	6.0
paper	1.0	9.1	15.4
Cement	104. (i)	288	324
Glass-bottle	-	5.0	10.4
Crude Petrol	-	-	0.5
Crude Iron	-	81.3 (k)	77.9
Steel	-	37.4 (k)	79.2
Sheet-Iron and pipes	-	3.2 (k)	13.6
Coke	23.0	96.9 (l)	324.0

Source: IGM, Aylık İstatistik Bultenleri; OECD, Industrial production 1900-1959, Paris 1961, BİYK, T.C. Merkez Bankası Bulteni, Nisan 1937 (quoted from Dr. Serin, N. Turkiyenin Sanayi İlesmesi. op.cit.p.190 a) (a) tobacco & cigarettes b) 1948, c) 1932, d) 1933, e) 1938-1946 only the state, f) 1938 - only the state, g) 1948. h) 1936, i) 1930 k) 1940. l) 1939.

B - THE SECOND FIVE-YEAR INDUSTRIALISATION PLAN - 1939-1943

Before the period of the First plan was over, the government in 1936 prepared the second Five-Year plan in order to establish over 100 plants, particularly in the field of mining and chemical industries.<sup>(1)</sup>

According to the second Five-Year Industrialisation plan it was decided to establish plants in the following fields: (1) Mining (general) (2) coal mining, (3) Regional electricity plants, (4) home fuels industry and trade, (5) earthenware industry, (6) Food stuffs industry. (7) chemical industry. (8) engineering industry. (9) Marine transport.

As in the First plan, account had been taken of industry which was compatible with the economic structure and conditions. It called for domestic raw materials and large capital and new techniques.

It was expected that local minerals which were in low demand in the domestic market, would be exported on better terms than in the past in a raw or semi-finished state.<sup>(2)</sup> There was a project in the engineering industry for processing the semi-finished products of the Karabuk Iron and steel plant which was completed at the end of the

---

(1) 2 ci. 5 Yillik Sanayi plani, 1936, p.XLX, p.21-22, And, Hershlag Z-Y.op.cit.

(2) Dr. Serin N. and Hershlag.

end of the First plan.

The planners laid great stress on the development of fuel and power industries, and for this reason some essential measures were to be taken to increase and nationalise coal production. In order to meet the needs of electricity energy, two-electric power - stations were to be established. The electric energy would be supplied to the new industries which were to be set up in the large cities in the West of Turkey and to home consumption as well.

An erection of an electric power station near Zongouldak was also included in the plan. (1)

Industrialisation of Eastern Turkey was also taken into account by establishing a yarn factory in Evzurum, and a cement factory in Sivas, two sugar plants and also a meat packing industry. An agricultural equipment plant of Ankara was also projected. The development of the Zonguldak - Karabuk area by the improvement of the railway networks, transportation, and construction of a modern port was also urged. (2)

The total investment directed to the implementation of the second Five-Year plan were estimated to be round (2) 111.845.000 million liras which were more than the investments of the First-plan.

---

(1) See, Hershlag Z-Y Op.cit. p.108

(2) The targets of the Second Five-Year plan were declared by the Government in Sept. 1938.Ibid.

(3) Dr. Serin, N, Op.cit. p.142.

After 1941 there was not any satisfactory data on investment or production due to withdrawn statistical operation.<sup>(1)</sup> However, fixed investment of the State Economic Enterprises which were estimated for that period<sup>(2)</sup> might present some knowledge of the investment activities.

The changes which occurred in the fixed capital investment of the State Economic Enterprises were as below:

<u>Years.</u>	<u>Million T.Liras.</u>
1940	161.5
1941	172.6
1942	186.6
1943	239.2
1944	298.7
1945	328.7

---

Source: Eldem, V. Turkiyede Sanayilesme Hazeketi, IFM, Ekim 1946, Temmuz 1947.p.53 (quoted from Dr.Serin - Türkiye'nin Sanayitesmesi)

Apparently the investments which were mainly made through S.E.E. showed a rise of 48 per cent between 1940 and 1943, which was mostly due to the conditions created by war economy of that period.

---

(1) Dr. Serin.N.Op.cit.P.142.

(2) Eldem,V.Op.cit.p.53.

In the Second Five-Year period, no new investments took place in the productive fields, and even the execution of the plan almost lapsed because of the pressing need for the production of war materials. The Government concentrated merely on the strengthening of its military position.

II World War was a great financial burden on the economy where almost 1 million people were under military service. Therefore the Government's needs for financial resources rose tremendously. The first measure adopted was to increase the rates of indirect taxes (national defence tax) and to introduce unusual taxes like the Wealth (Varlik Vergisi) tax. Secondly the Treasury was borrowing from the public through short-term treasury bonds (savings bonds). With the difficulties in repaying these bonds the debt of the government to the Central Bank increased and the volume of money in circulation recorded an enormous rise by increasing from 280 million liras in 1938 to 900 million in 1946.<sup>(1)</sup>

The money created against these short-term treasury bonds was spent on military requirements and this clearly resulted in a continuous fall in the value of money. For instance, the wholesale price index, given 1938=100, rose to 280 in 1942 and 457 in 1943. Inflation, which stemmed

---

(1) Prof. Cillov. H. op.cit. p.133.

from the War Economy also caused a big fall in the foreign value of money while the value of the ₺ which was equal to 126 Kurus in 1938, rose to 131 Kurus in 1943 and to 193 Kurus in 1945.<sup>(1)</sup>

As a result of such a policy imports in 1941 fell markedly from 150 million liras in 1938 to 75 million liras.<sup>(2)</sup> There was also a severe shortage of consumption goods and rationing of such goods had to be introduced.

Against a high rate of growth in the industry during the First Plan, industrial production dropped comparatively in the period of 1939-45 owing to the Second World War. The industrial production index on the base of 1938=100, rose from 136 in 1940 to 138 in 1945.<sup>(3)</sup>

We have no complete data on industrial production confined only to the second Five-Year plan (1939-43), but the figures of some industrial products for the period 1938 - 1945 might be useful for that purpose.

Despite the fact that the implementation of the second plan coincided with the II-World War, industry had recorded high growth in the production of some industrial goods. For example, sugar, cotton and wool yarn, cloth, cement, steel and sheet-iron, pipes and coke production had

---

(1) Cillov. H.op.cit.

(2) Cillov. H. op.cit. p.133.

(3) See, Konjoukture Dergisi, No.10.-12, Ankara 1954.p.38.

increased considerably. (See, Table 4.)

---

The Second Five-Year plan aimed mainly at the development of producer goods, while the First plan was basically concerned with the consumer goods industries. Mining, electricity, machinery and equipment constituted its focal points. In order to accelerate the growth of Mines, a Law was passed in 1935 giving the Government the right to nationalise all mines inadequately run by their owners or those leased for a period of one year.<sup>(1)</sup> In December 1937, a Three-Year Development Programme for Mines was prepared, which was co-ordinated with the Second Five-Year plan.<sup>(2)</sup>

The Second Five-Year plan differed from the First in respect of its scope, and the investment expenditures. Actually the former one showed a large degree of co-ordination between various fields, and embraced the domestic market as well as the export and import sectors. Investment expenditures on the other hand exceeded the figure of the First plan because it covered a wide range of industries including mining, electricity and cement production.

---

(1) See, Hershlag, Z-Y. (Near East and India 1935)

(2) Dr. N.Serin, op.cit. P.118.

While the targets of the First Industrialisation plan were mostly realised, the second Five-Year plan was interrupted by the II-World War, and the economy concentrated more on the production of War materials.

Turkey in both the First and Second Five-Year plans relied largely on foreign aid and foreign experts and technicians. As we saw earlier Turkey for the implementation of the First plan received a large amount of foreign aid from the Soviet Union particularly in the field of textiles. But during the second plan Turkey turned mostly to British loans and experts in the execution of several substantial projects, though Russia's role was considerable in the electrification of the country. (1)

After the II-World War (in 1947) Turkey prepared a third plan "Economic Development Plan" whose main target was to speed up industrialisation retarded because of the last war and also to increase the productivity and the quality of the industrial products concerned. (2) But the implementation of this plan for one thing or another never took place.

---

(1) See, Hershlag. Z-Y. Op.cit.

(2) Dr. Serin; , Op.cit.

#### IV - THE PLANNING ORGANISATIONS: A- THE SÜMERBANK.

For the preparation and execution of the plans the Sumerbank, a public enterprise was established in 1933; it also included a financing function. Its responsibilities were outlined when set up by Law: <sup>(1)</sup> to prepare projects for new plants, and to establish and run them; to run the enterprises transferred to it by the Office of State Industry; to support financially those industrial establishments whose creation or enlargement would appear to be beneficial to the national economy; and finally to give credits to industries and to perform general banking functions.

The Sumerbank was not only a planning agency for it had wider responsibilities for running the industrial establishments and financing them. The last function distinguishes it from the modern planning body.

The first heavy industry run by it was the Iron and Steel Works of Turkey. It also controlled the light industries such as the textile mill at Kayseri and various other textile plants. Its interests were not limited only to these fields, but also to other fields like hide and footwear, cement, firebrick and ceramics. For this purpose

---

(1) Hanson, A.H, Op.cit.

it set up a commercial organisation for buying and selling. Its initial capital was 20 million<sup>(1)</sup> liras which subsequently rose to 200 million liras, and was entirely provided by the State. (it depended on the Treasury.)

#### B - ROLE OF THE ETIBANK.

During the First Industrial plan (1935), the Etibank was founded with operational responsibility rather than planning. The Etibank was authorised with various powers; to exploit mines, quarries and oilfields; to trade in minerals and mining equipment; to generate and distribute electricity and manufacture and sell electrical equipment.<sup>(2)</sup> Its capital was also provided by the State, which first stood at 20 million liras and then rose to 150 million liras by 1946.<sup>(2)</sup>

Its electrical concerns increased considerably after 1936 when the First Five-Year plan was modified to give priority to the construction of electricity works. In 1938 it was authorised to construct a large central power-house at Zonguldak (Gatalagzi) and Kutahya<sup>(3)</sup>. The coal industry in Ereğli was also attached to the Etibank, and other mines, including lignite, chrome ore, sulphur and copper, were also run by it.

---

(1) Hanson, A.H. "Public Enterprise & Economic Development"  
London, 1959

(2) Ibid - pp.120-121 (The Law of 2805 in 1935)

(3) Hanson.A.A.op.cit.

The Institute of Mining and Research, which was established in 1935, and which was attached to the Etibank, had the power to do research on mines and petroleum, and other mines deposits and to prepare projects on these industries.

The Sumerbank and the Etibank as planning, managing and financing agencies have remained the most outstanding public enterprises over a period of 25 years. But their planning and projection functions did not cover the whole economy, and as we explained elsewhere, their responsibilities were limited to consumer goods, mining and electric industries.

---

#### V- EVALUATION OF THE FIRST AND SECOND FIVE-YEAR INDUSTRIALISATION PLANS.

As we have seen earlier, the State by following an estatist economic policy during the 1930's wanted to industrialise the country by launching Five-Year industrialisation plans. Turkey, the first country among all under-developed countries who adopted economic planning, had recorded a large industrial growth during both the First and the Second plans.

But could we consider these industrialisation plans as complete and modern in an economic sense?.

Economic planning can be described as "a central direction of all economic activity according to a single plan, laying down how the resources of society should be consciously directed to serve particular goals in a definite way"<sup>(1)</sup> Besides this very broad definition of planning, it could also mean "a direction of all necessary measures and resources for the realisation of a specific project or set of projects "( relatively limited planning)<sup>(2)</sup>

(i) The Turkish First and Second Five-Year plans do not fit into the former traditional approach of economic planning, where the whole economy and the whole resources are subjected to the planning process. Turkish plans were not comprehensive plans embodying the integrated development of agriculture, industry, energy and other sectors. Inter-sectoral relations were not established, and the only concern of the government was to concentrate on the light and heavy industries at the expense of other fields, though they were finally to receive due attention. Targets for production, investments and financing were not specified at all. The industrialisation plans were formulated without a systematic assessment of conditions, comparison of alternatives and a forecast of future conditions, and without considering the impact of the plans upon the whole economic activity of the state.

---

(1) See, Hayek. , The Road to Serfdom, p.35.

(2) See, Bettelheim C, Studies in the Theory of planning, Asia publishing house, N.York, 1961, p.3.

However, one must admit the fact that during the formulation of the plans, though they were prepared with the help of foreign experts and planners, there was no proper statistical office to present sufficient and correct data. Moreover, there was no assessment of demand and supply conditions in the market (market research) on which to base the economic plans. Also one has to take into account the planning experience and knowledge which prevailed during the 1930's.

(ii) Second there was no co-ordination between different projects which were prepared by several departments of the government.<sup>(1)</sup> Co-ordination and momentum in the production remained uncertain.

(iii) These plans covered only the investment activities of the state enterprises which were established to foster industrial growth. The private enterprise remained as a part of the economy, but their activities were not included in the Industrial plans. The activities of the S.E.E. eclipsed the role of private enterprise. Also the investments of the private sector dropped considerably, (especially investments of the foreign companies), owing to the State favouritism in the distribution of import licences, raw materials, fuel and credits.<sup>(2)</sup>

---

(1) See, Hershlag, Z-Y.Op.cit.

(2) Dr. Serin,N. op.cit. p.172.

(iv) In order to create a better co-ordination and administration planning must be projected by a Central Organisation. The planning process in a broad sense, includes not only, (a) the assessment of conditions and the formulation of alternative plans, and (b) the selection of a particular plan or plans, but also (c) the execution of the plan by an administrative apparatus.<sup>(1)</sup>

In Turkey the First and Second Five-Year industrialisation plans were a composition of many long-term projects of different ministries, and the responsibility to formulate them rested on different organisations. (i.e. The Sumerbank, the Etibank). While the Sumerbank was focused on the textile, iron and steel, cement and ceramics industries, the Etibank, as another planning and financing agency, prepared projects in the field of mining and electricity.

(v) Finally an economic plan, even if it is complete in respect of formulation, cannot be regarded as a plan unless it is implemented. Therefore the Second Five-Year plan in part and the Third Five-Year plan (Turkish Economic Development plan) of 1947 which remained completely in the form of a blue print, can scarcely be assumed plans in the real sense.

---

(1) John.E.Elliott, Economic Planning reconsidered, QJE, 1958, Vol.72, p.58.

Despite these shortcomings we have just listed above, both the First and the Second Five-Year plan had played a very significant part in establishing the main industries which now constitute a sound base for further industrialisation.

Actually, the structure of the economy had changed substantially, as the share of industry in the national income rose from 10 per cent in 1927 to 16 per cent in 1938 (a 60 per cent rise over 11 years), against a sharp drop in the share of agriculture from 67 per cent to 48 per cent in the same period. (Table, 1)

The national income on the other hand had shown noticeable progress during 1939-1948. According to the data presented by Chenery H.B. and Brandow C.E.,<sup>(1)</sup> the national income index increased from 72 in 1929 to 123 in 1948, while the index per capita from 37 to 104 at the same period.

National Income (1938 = 100)

Years	N. Income	Per Capita.
1929	72	37
1935	86	88
1948	123	104

(1) Chenery H.B., Brandow C.E., Cohn E.T. Turkish Investment and Economic Development, U.S.A., operation Mission to Turkey, Ankara, 1953, p.4.

PART II

CHAPTER III

FIFTEEN YEAR DEVELOPMENT PERSPECTIVE.

AND PLAN STRATEGY.

## I - A SURVEY OF PAST DEVELOPMENTS.

In order to appreciate the real problems which endangered the economy prior to the First Five-Year plan, a brief summary of the main changes undergone by the economy must be clarified. Therefore we can, now, turn to the developments which occurred in the last decade.

-I-

At the end of the Second World War, Turkey was compelled to sustain her heavy defence expenditures because of external pressures which threatened the integrity of her territory. No doubt this delayed the return to peacetime conditions and the transition, to a multi-party system was not carried out until 1946. Such a transition created some doubts in people's mind about its continuity and adaptability, and as a result the economy was in a state of stagnation. Without strong political stability, it was really hard to undertake development in order to push the economy forward.

In the early 1950's a rapid expansion took place due to increasing foreign aid under the name of the Marshall Plan. This economic expansion was intensified by abundant imports of capital goods and mechanical equipment. The mechanization of agriculture caused a considerable extension in the cultivated land. Turkey became a potential grain

supplier on a world scale within the period 1950-1953. The economy was experiencing a brisk activity owing to good crop years and the favourable foreign trade which stemmed from the Korean War.

It may be said that the Turkish economy was in equilibrium in 1950. There was no sign of inflationary pressures in that year and the import surplus was relatively small as can be seen in Table 1. But this situation did not last long and prices have since risen by an average of more than 10 per cent per year; and the import surplus has increased (from 88.0 million \$ in 1951 to 184.3 million dollars in 1955, see table 1), exceeding foreign exchange availabilities. The excess was balanced by the accumulation of commercial debts, to foreign suppliers.

The prices which started to rise in 1951, later gained momentum to approach a hyperinflation after 1954. This inflationary situation was due to (1) a very large increase in the supply of money, and (2) insufficient rise in the supply of production against a higher rise in demand. (1)

A - After 1954 there was a tremendous rise in the supply of money and the volume of money in circulation.

---

(1) Dr. N. Serin. *Turkiyede Istikrar Politikasi*, AU SBF Dergisi, cilt XIV, Aralik 1959, No.4 p 25-26

Supply of Money (Million T.Liras)

	1955	1956	1957	1958
Total supply of money	4.476	5.613	7.397	8.288

Source: CEEC, Economic conditions in Member and Associated Countries of the OEEC, Turkey, paris 1958, p.23 (quoted from Dr. Serin.N.)

The rise in the supply of money was 25 per cent in 1956 and 32 per cent in 1957. Money in circulation on the other hand increased from 1.474.116 million liras in 1954 to 3.827.166 million in 1958.<sup>(1)</sup> This rather large increase of the money in circulation stemmed from two basic causes:

- (1) exceedingly rising investments over domestic savings.
- (2) a high price policy for agriculture.

After 1950 an expansionist economic policy was followed in the public investments. The government in financing the investments of the SEE, largely appealed to the resources of the Central Bank resulting in a substantial rise in the volume of money in circulation.

Actually there was an excess in the proportion of gross investments to GNP which rose from 9.4 per cent in 1950 to 14.3 in 1955, while GNP at constant prices increased by almost 40 per cent during the same period. If the gross

---

(1) June figures of each year.

investments between 1950-55 are deflated by the whole-sale price index, the increase amounts to 2.2 times as much.<sup>(1)</sup> Therefore such a rapid increase in the level of investments (which were in excess of domestic savings,<sup>(2)</sup> and largely financed by the Central Bank) created an excess demand over supply of production which entailed an inflationary pressure.

Gross Investments 1950-57 (at current prices)  
(Million T.L.)

	1950	1951	1952	1953	1954	1955	1956	1957
Gross Investments	976	1.252	1.801	2.099	2.487	2.960	3.304	3.75
As % of GNP.	9.4	10.2	12.6	12.5	14.5	14.3	13.2	12.0

Source: OEEC, op. cit.p.13.

(i) The smaller rise in supply was due to the nature of investments which were mostly long-term projects (hydro-electric power, dams, etc) and social services (i.e. roads, hospitals...) which could not add much to output in the short period.

No doubt there were also some investments with a short gestation period and would increase output almost immediately (i.e sugar, cement projects).

(1) See, Alexander A.P. Turkey, in Economic Develop.t.Repalasis, Mears & Adelman, N.York, 1961, p.475-76

(2) The difference between investments and domestic savings (deficit of current account) between 1957-1959 rose by 600 per cent rising from 0.2 billion liras in 1957 to 1.4 billion liras in 1959. SPO.First Five-Year plan. p.108

Manufacturing industry for instance had recorded an essential rise between 1950-56, increasing by 50 per cent.<sup>(1)</sup> A considerable progress was registered in the production of sugar, cement and cotton textiles. Yet the growth of manufacturing became very slow after 1955. This slow growth was due to difficulties in the imports of spare parts and raw materials. Only 75 per cent of total capacity was utilized.<sup>(2)</sup>

(ii) An excess of demand over supply was also experienced because of the agricultural character of the country, which is always susceptible to weather conditions. In the second half of the 1950's there had been marked fluctuations in the production of agriculture because of bad weather. (especially in cereals, cotton and tobacco)<sup>(3)</sup>

B - Agricultural price policy: After 1950 the government followed a high price policy for the agricultural sector. The main reasons for that policy was explained as to increase the income of the farmers and peasant population, and to provide a much higher standard of living, and to enable them to increase their investment undertakings.<sup>(4)</sup> Yet the rise in their incomes was ensured at the expense of other groups which later pushed up the prices of their manufactures and services and which gave an additional twist to the inflationary spiral.

---

(1) Dr. Serin, N.op.cit. p.29

(2) OEEC, Turkey, op.cit. p.11-12.

(3) See, Chp.4.

(4) See, Dr. Serin. N. op.cit. p.30.

Although exports of the country rose by 50.3 per cent between 1950 and 1953, they declined after 1953 because of the poor harvest in 1954, and the reaching of the limits of cultivable land which was now lacking intensive methods to increase its productivity. On the other hand changes in the structure of production, rising incomes and an overvalued currency forced an even more rapid increase in imports.

However, some measures of restriction were put into force after 1952, but even so imports exceeded foreign exchange made available from exports and from U.S. public loans and grants. The foreign commercial debt in 1956, was estimated to be about \$ 200 million.<sup>(1)</sup>

The large investments and increasing public expenditures were met through deficit financing. The expansion in the money supply was reflected in prices, while real national income was not growing at the same pace. As a result the external value of Turkish lira began to fall and the Government tried to prevent a further drop by setting two restrictions: First, it introduced price controls and legal sanctions to stop the rise in prices; and second, the state Economic Enterprises were forced to sell their commodities at prices below their costs, and these losses put further burden upon the funds of the

---

(1) Alexander, A.P. Turkey, in Econ. Development, Papatasis, Mears and Adelman, N.York, 1961, p.479.

Government and consequently led the Government to additional deficit financing which resulted in an inflationary spiral.

By 1958 the economy was in complete imbalance and could only survive by day to day measures.<sup>(1)</sup> As the situation deteriorated a stabilization programme was adopted in August 1958. The aims of this programme were to end deficit financing and to stop the expansion in money supply and to set import restrictions on foreign imports.

For these purposes, the stabilisation programme imposed limits on the issue of the Central Bank and the credit expansion of other banks. Second, the external value of the Turkish lira was de facto devalued by a system of premiums. Third, substantial foreign aid was provided to remove bottlenecks and shortages.

Despite the measures taken within the framework of the stabilization programme, the prices continued to rise for a while after 1958, but after the end of 1959 the price level was relatively stable as can be seen in Table 2. But the new adjustments in the exchange rate in 1958 did not help to avoid the foreign trade imbalance. Little or no progress was being made towards raising receipts from Turkey's traditional exports or creating new sources

---

(1) First Five-Year Dev.t plan, 1963-67, p.11.

of export revenues. Because of the import programmes which set up global import quotas in 1958, the productive capacity of the economy was under-utilized and it was not until 1959 that the first step was taken towards a return to trade liberalisation, when a number of spare parts and raw materials were put on a liberalised list.

Now, I shall sum up the consequences of the deficit financing, which gave rise to strong inflationary pressures in the economy and hampered economic development efforts.

Although there were some arguments that deficit financing increased investment and business activity and also encouraged private enterprise, it must be borne in mind that inflation damaged the economy from various points.

First of all inflation created an unjust income distribution in which middle class and civil servants had to carry the burden of inflationary finance. As a result real incomes of fixed income recipients declined in favour of wealthier people.

Second, normal markets and the price mechanism were unable to function properly and this caused mis-allocation of resources toward speculative channels. These non-productive forms included investments in foreign assets, inventories and real estate. Most noticeable was the

construction boom which has showed a rapid increase since 1953.

Third, inflation contributed a great deal to balance of payments difficulties. Imports of capital goods necessary for the productive utilization of domestic savings became more difficult. Because money declined in value while the exchange rate was maintained artificially at a high level, exports fell, imports increased and the shortage of foreign exchange led to the imposition of physical controls over all foreign trade.

Fourth, foreign exchange shortage, which was created partly by the inflationary conditions, posed the most immediate and serious threat to the investment effort. The groups adversely affected by the inflation resisted the reduction in their consumption.

Fifth, uncertainties and instability created by inflationary pressures discouraged private foreign investment and this situation finally gave rise to capital flight from the country.

All these strains imposed on the economy led to a strong belief in the country that they were inescapable consequences of an "unplanned economy" approach to economic development problems. With the end of the Marshall plan in 1952 and the decline of the U.S. Mission's influence on Economic policy the pressure on the Government to formulate

a sound and rational programme ebbed. Several years after this, no effort at economic planning was made. Annual plans were submitted to OEEC but they were more or less a picture of the expected changes in the national accounts. A rapid increase in the national income during the period 1950-53 and favourable weather and good markets during the same period, which gave rise to a high level of economic activity, convinced many people, as much as the political leaders in power, that the road to self-sustained growth had been reached. Given a sound fiscal policy and the necessary social overhead investments all other problems would gradually be solved. As the favourable effects of this period subsided and the economy slowed down after 1953, the need for a more positive policy rose again.

At the beginning of 1960, it was evident that no substantial improvements had taken place in the fundamental weakness of the economy; i.e. unemployment, deficits in trade and balance of payments, inelasticities of supply, etc. There was a definite need for a policy of planned Development in order to systematize the country's economic effort.

It was not until the Revolution which took place on May 27, 1960 that Turkey entered such an era of planned development. For this purpose, a government agency, the

State Planning Organisation, was established according to the provisions stated in the new Turkish Constitution of 1960. Article 129, states that:

"Economic, social and cultural development is based on a plan. Development is carried out according to this plan."<sup>(1)</sup>

The State Planning Organisation which was formed by Law No.91 on September 30th, 1960, is attached to the Prime Ministry and has the duty to assist and act on an advisory body to the Government in determining economic and social policies and objectives; and in formulating long and short term plans for the realisation of the objectives adopted by the Government.<sup>(2)</sup>

This Organisation was entrusted with the task of formulating the Development plans on a five year basis and consisted of a High Planning Council and Central Planning Organisation, the latter being composed of the "Economic Planning, the Social Planning, and the Co-ordination Departments and a Secretary-General's Office." In addition to these, Sector Committees were set up to prepare the statistical information in the various sectors that would be used in putting together the programme.

---

(1) Introducing Turkey's S.P.O. Ankara, 1963, p.5.

(2) Ibid. P.6.

TABLE 1 - FOREIGN TRADE SITUATION.

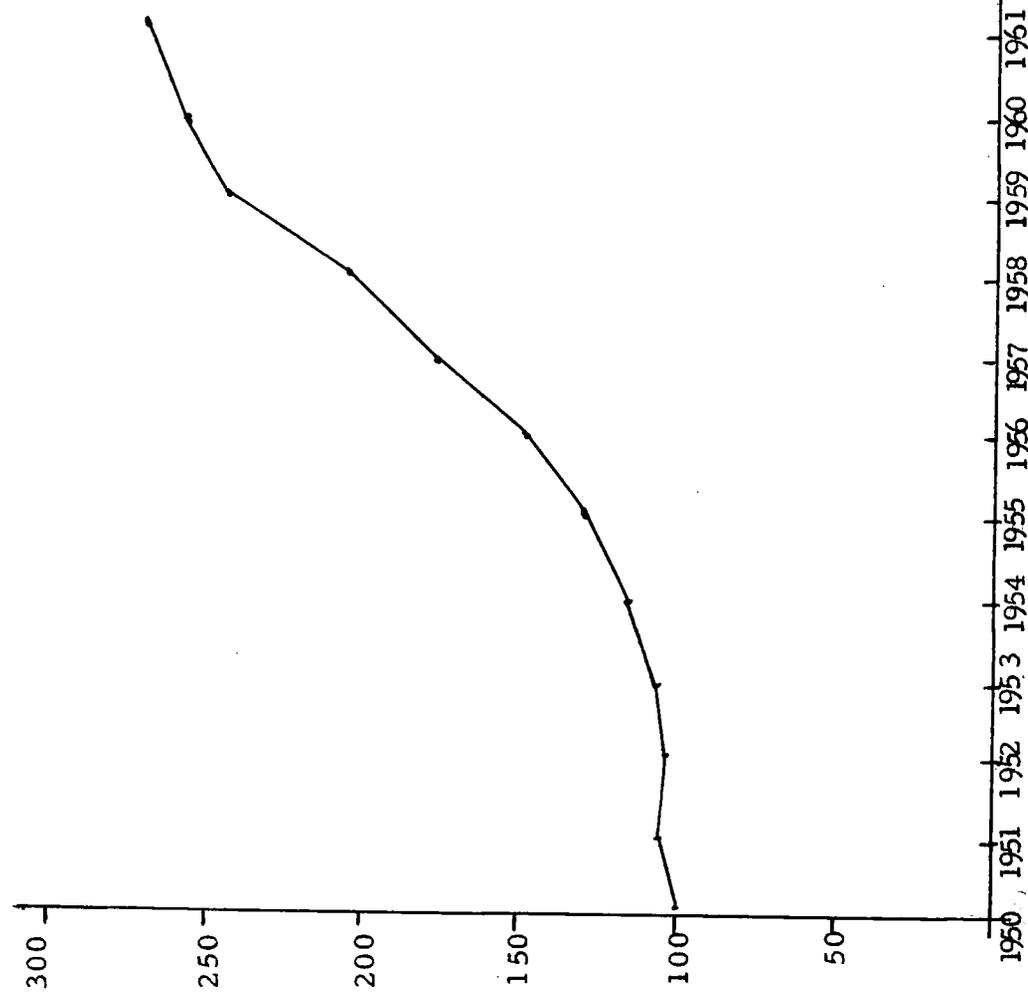
(Million \$)

Years	Imports	Exports	Deficit
1950	285.7	263.4	22.3
1951	402.1	314.1	88.0
1952	555.9	362.9	193.0
1953	532.5	396.1	136.4
1954	478.4	334.9	143.5
1955	497.6	313.3	184.3
1956	407.3	305.0	102.3
1957	397.1	345.2	51.9
1958	315.1	247.3	67.8
1959	470.0	353.8	116.2
1960	468.2	320.7	147.5
1961	509.5	346.7	162.8

Source: S.P.O. First Five-Year Dev.t plan, 1963-67, p.21.

Table.2. General Price Level.

Years.	Wholesale price index. (Ministry of Commerce.)	Ankara Cost of Living index. (Central Statistical Office)
1950	100	100
1951	107	103
1952	108	107
1953	110	110
1954	121	119
1955	131	141
1956	153	151
1957	181	174
1958	208	208
1959	250	258
1960	263	264
1961	271	264



Source: First Five-Year Plan, 1963-1967.p.19.

## II - FIFTEEN-YEAR DEVELOPMENT PLAN - 1963-1977

### THE GOALS.

Like other programmes in many underdeveloped countries, the Turkish Fifteen-Year Development plan is not exclusively production orientated. The plan which is viewed in a fifteen-year perspective seeks to promote a high rate of growth with a high level of employment; to achieve a balance in external payments; to train sufficient members of high level scientific and technical personnel in every field as required for Turkey's development; and to realise all those targets according to the principles of equity and justice.

However, the most direct strategy that has been adopted for the Development Plan is aimed at the following goals:

#### 1. RATE OF GROWTH.

Turkey proposes to achieve a rate of growth of 7 per cent (at 1961 prices) with G.N.P. rising from TL.52-7 billion in 1962 to 145.3 billion at the end of 1977. In fact, this means that a 175 per cent rise in national income has been envisaged.

Since the country during the last decade has sustained a rate of growth approximated to this rate (almost 6.p.c.), a 7 per cent rate of growth has been regarded as a sufficient realisation. As an alternative, an 8 per cent rate of growth has also been proposed during the debate which took place on the "Objectives and strategy of the plan".<sup>(1)</sup>

Given a 3 per cent growth in population, a 7 per cent rate of growth will provide a 4 per cent net increase in the per capita income. It is also pointed out that this 4 per cent net growth would double the standard of living of the country within a single generation. It is believed that this rate would create a self-sustained economic development in the same period, by assuring the steady expansion of the net investment, technical skills, management and other input flows that growth requires.

Therefore, it is clear that the allocation of resources should be conducive to their best utilization. This point will be closely examined in the 4th Chapter.

The Investment target which is assigned to this rate of growth has a great importance from the point of view of chronic disequilibrium, inherent in the structure of the

---

(1) It was pointed out by the experts of S.P.O. during the conference held in Ankara, in May 1962, which was attended by many members of the S.P.O. and other international organisations.

Turkish economy. It is calculated that investment needed for this rate of growth would be 18.3 per cent of the GNP for the First Five-Year Plan and 21 per cent for the next ten years.

As a result of an effort to increase investments from its low level of 16.3 per cent in 1962 to 19.4 per cent in 1967, the share of private consumption expenditures in the G.N.P. would decline from 73.2 per cent in 1962 to 67.9 per cent in 1967 and finally for 63 per cent in 1977.<sup>(1)</sup> An increase in the volume of real savings would be brought about by restricting consumption and thus rechanneling those released resources into other objectives. This is a feasible method of inducing capital accumulation. A strong financial institution would also be needed in order to mobilize savings for productive investment. But the mere existence of channels of finance does not guarantee an increase in the level of capital formation.<sup>(2)</sup>

The rate of growth of private consumption would have to be kept well below the rate of growth of the G.N.P. (the former 2.4 per cent per head, as against 4 per cent for the G.N.P.). The drop in private consumption will be brought about by some effective fiscal and monetary measures,

---

(1) S.P.O. planning in Turkey, Special issue, Sum. of the first five-year plan, No.1. Ankara, 1963,p.17.

(2) R.W.Goldsmith, A.study of saving in the U.S. 1955

such as raising revenues from taxes through higher tax rates and through the introduction of new taxes, and by encouraging private savings proportionally to disposable incomes..

The average increase in private consumption would be 5.4 per cent during the First Five-Year plan and 3.3 per cent per annum in subsequent years. Given the rate of growth in population, this means that per capita consumption would rise annually by 2.4 per cent. The slow growth of private consumption during the fifteen-year perspective would be alleviated by measures aimed at improving the living standards of the poorest groups. These are; fiscal measures for a fair re-distribution of income; an extension of the social security system; and cheap housing schemes.

Since consumption requirements of the increasing population are one of the main factors limiting resources to be allocated to investment, it is quite reasonable to see that planners have tried to keep consumption expenditures within certain limits.

Under the impulse of expenditure linked to development, current public expenditure will show some rise and therefore it is estimated that it would be 15.4 per cent of G.N.P. in 1967, compared with 14.4 per cent in 1962, and

eventually would reach an "optimal" proportion of 16 per cent at the end of the fifteen-year period. The increase projected is due to high expenditures on education, health and research.

## II - EMPLOYMENT.

The second major goal of the Development Plan is to ensure the highest possible level of employment at satisfactory income levels.

The total additional employment that the investment and production targets will provide is 6.8 millions. Whereas it will be necessary to create jobs for 7.5 million people plus the 1 million known disguised unemployed in agriculture. Therefore it is apparent that a fifteen-year perspective would not be able to solve the employment problem. It is our opinion that the rate of growth and investment should be projected at much higher rates so that unemployment and disguised unemployed in agriculture can be eliminated.

Disguised unemployment in agriculture was due to rapid population increase in the last decade and inadequate employment opportunities created in agriculture and other sectors. Therefore, it is suggested that there should be a balanced development between agriculture, industry and services. Great hope has been put upon the

industrial sector to absorb this large unemployed labour force, because an annual rate of growth of 11 per cent was calculated for this sector. As can be seen from Table 4, the share of the active population in industry would rise from 9.8 per cent in 1962 to 11.9 per cent in 1967 and to 15.6 per cent at the end of 1977. It can also be observed that in the First Five-Year plan, non agricultural employment should increase by 14 per cent on average so that this surplus can be absorbed.

Population policy designed for this purpose would not exert any effect on the issue of employment during the First Five-Year period or by the end of the fifteen year period. Moreover, it must be taken into account that the adverse effects of the spectacular improvements in the productive techniques could aggravate the situation due to their labour-saving nature.

### III - BALANCE IN EXTERNAL PAYMENTS.

The Fifteen-Year Development plan is aimed at restoring the deficit in the balance of payments. Therefore both the First and Second Five-Year plans will include measures to reduce trade and payments deficit.

It is stated in the First Five-Year plan that imports will be restricted while exports will receive great encouragement. This can be seen in the projection

of imports and exports in the First plan, where imports as a percentage of GNP will drop from 9.4 per cent in 1963 to 8.5 per cent in 1967. Also from the figures presented in chapter 4, we can find that imports will record a 24 per cent increase against 31.4 per cent in exports. Such a course of action is surely acceptable, but its realisation will depend upon the foreign trade policy of the country and the changes which will occur in the World Market.

Exports policy will be in the direction of diversifying export goods which, up to now, have been confined to a few traditional items. It is also expected to promote the export of manufactured goods. Turkey has a comparative advantage in producing labour intensive goods. However, exports will be dependent on the elasticities of foreign demand for our exportable goods. We have not seen any calculation made by the SPO, in this respect.

The feasibility of import substitution is indisputable while the Turkish economy is large and so are the potential sizes of its markets. Also Turkey is blessed with various kinds of natural resources for servicing material and energy needs for the projected

---

(1) The projection of Imports is discussed in the Chp.4.

development plan. This is the case with respect to the country's resource base for iron and steel making, petroleum and so on.

Balance in external payments will not be achieved only by promotion and diversification of exports or by import substitution, but by devoting some attention to increasing revenue from invisible items and especially from tourism.

However, the planners' expectation that the current external deficit which constituted 4 per cent of the GNP in 1962 would be down to 2.8 per cent in 1967 and completely eradicated at the end of the Second Five-Year plan is a rather difficult task to achieve.

#### IV - BALANCED GROWTH.

The most important application of the "Balanced development strategy is Turkey's attempt to promote agriculture and heavy industrial expansion. It is proposed to continue the strategy's twin emphasis upon agriculture and industry.

A high level of investment in agriculture has been projected not because this sector has been so far neglected, but because; in view of rapid industrialisation envisaged, there will be an essential need for surplus of farm output.

This doctrine may be justified because development of either sector by raising incomes, creates demand for the products of the other.

According to the Fifteen-Year Development plan, agriculture would lose its large share in the GNP decreasing from 43.8 per cent in 1962 to 29.4 per cent in 1977 (see, Table,3). The share of industry,<sup>(1)</sup> on the other hand, would show a noticeable increase by rising from 16.8 per cent of GNP in 1962 to 21.4 per cent at the end of the First Five-Year plan.<sup>(2)</sup>

---

(1) Including Manufacturing, mining and energy.

(2) See, First Five-Year plan, p.125.

Table 3 - Estimates of G.N.P. and Agricultural Product.

Years.	G.N.P. (T.L.Billion)	Agricultural product (T.L.Billion)	Agricultural product as % of G.N.P.	Agricultural product per Capita (T.L)	Agricultural product per capita of Rural Pop- ulation (T.L)	Agricultural product per capita of Active rural population. (T.L.)
1962	52.7	23.1	43.8	785	1.100	2.400
1967	73.9	28.3	38.3	838	1.300	2.700
1977	145.3	42.7	29.4	941	1.900	3.800

Source: S.P.O. First Five-Year Development Plan, 1963-1967. Ankara 1963. p.36

Table 4 - Distribution of Active Population Among the Sectors  
(Per Cent)

Sectors	1962	1967	1977
Agriculture	77.4	71.1	58.1
Industry	9.8	11.9	15.6
Services	12.8	17.0	26.3

Source: S.P.O. First Five-Year Development plan.p.36.

CHAPTER IV.

THE FIRST FIVE-YEAR PLAN

1963-1967.

THE FIRST FIVE-YEAR PLAN 1963-1967.

I.

The First Five-Year Development plan approved by the Grand National Assembly in the Summer of 1962, tries to give systematic answers to all problems of the economy which we mentioned in the last chapters. The plan became operative as from 1st January, 1963, for a period of five-years ending on 31st December 1967.<sup>(1)</sup> It is the first Development Plan which is comprehensive in the sense that it deals with the economy from various aspects within a Macro Growth Model.

The following sections limit themselves only to the analyses of the targets and criteria of the First Five-Year plan.

II.

OBJECTIVES OF THE FIRST FIVE-YEAR PLAN.

The objectives of the first Five-Year plan can be summed up as follows:<sup>(2)</sup>

1) An increase of 7 per cent per annum in National Income the pattern of investment being designed to attain this target.

(1) Planning in Turkey, special Issue, Summary of the First Five-Year plan, SPO. Ankara, 1963, p.8.

(2) First Five-Year Development plan 1963-1967, SPO. Ankara p.31, 107

2) To raise agricultural production with a view to expanding exports and meeting the growing industrial needs for raw materials and as a result fostering industrialisation.

3) A full utilization of manpower resources and a substantial expansion of employment opportunities and a rational distribution of manpower among various sectors.

4) Reducing the deficit in the balance of payments and trade, and finally,

5) Realising all these goals according to principles of social justice and equality.

#### I - THE RATE OF INCOME GROWTH.

The first objective of the plan is to maintain "a sufficiently high rate of income growth". Therefore the rate is set at 7 per cent per annum. In a country where 40 per cent of GNP comes from agriculture, however, yearly rates of growth in the national income may vary as a result of weather conditions. This is why it is stated in the plan strategy that this is an average rate of growth during the Five-Year period. The purpose for adopting this rate is that levels of activity in many sectors in Turkey are so low that considerable margins exist for rapid increases.

What this target means is that "the country is willing to do all necessary sacrifice in order to achieve it" Of course, the planners seem to pay great attention to the past

development in the rate of growth. From 1950-1960, the GNP increased at a rate of 5.6 per cent per year, and this was partly due to the cultivation of new land of increasingly poor quality.

In a simple Growth Model, an equilibrium between the expenditure to be made in the five-year period and the resources required for these expenditures was established. The relation between GNP and various macro-economic values are shown in Table 16 and 17. As can be seen from the tables, GNP will rise from 52.7 billion Turkish Liras in 1963 to 73.9 billion in 1967. This is a 40 per cent cumulative increase by 1967.

It is stated that the creation of a number of basic industries will be necessary before the growth of the manufacturing sector can be accelerated. Most of these industries are in the design and construction stage and the ones started in the past are unfinished. Therefore it is improbable that their impact will be felt before another five-years.

The marginal investment/income ratio in agriculture is very high calculated to be 23.1 for the 1963-1967 plan period.<sup>(1)</sup> This high ratio is due to large and expensive land improvement works which will be undertaken for

---

(1) The calculation of the marginal propensity to invest in Agriculture is presented in page 120.

substantial increases in agricultural output. Actually agricultural investments will rise from 1.213.2 million liras in 1963 to 2.851.0 million in 1967 (a 134 percent increase over 5 years.) The increase in agricultural investments, however, will be largely in the form of extensive investments rather than intensive where 45.3 per cent of the total investments will be devoted to irrigation works, and 6.1 per cent to land improvement.<sup>(1)</sup> One may think that the impact of the extensive investments will not be felt in the first Five-Years.

Is the Turkish target rate of growth of GNP adequate one? One may object to the feasibility of this rate of growth for three reasons: (i) First, one is tempted to think that this rate was adopted mainly because it has roughly been the average for the last decade. The rationality behind this decision is rather weak taking into account the urgency and pressing needs of the Turkish economy and the very rapid rise in population. The Turkish rate of growth of population is currently around 3 per cent per annum. It may even increase if the death rate comes down as elsewhere under the impact of increasing medical facilities and health programmes. Population control is being seriously attempted but cannot

---

(1) First Five-Year Development plan 1963-1967.p.145.

be expected to yield quick results. A 4 per cent growth of per capita income is thus not enough target especially when one bears in mind the fact that there is an urgency of creating more jobs to alleviate both existing and potential unemployment and under employment. (ii) Secondly, there is a strong evidence<sup>(1)</sup> that in the 1950's a substantial part of investments were directed into unproductive sectors like transportation, construction, housing and health etc., whereas if they had been used in productive ones (agriculture, industry and manufacturing) the economy would have experienced a rather high rate of growth. It is clear that the economy has a vast potential to attain a higher rate of growth should the investment resources be allocated on efficient criteria. (iii) Also this target seems to be a moderate one when one compares it with the growth rates aimed at by some other developing countries.

---

(1) See, OECD, Turkey, May 1963, Paris, p. Also, see, Dr. Serin.N, "Türkiyede İstikrar politikasi, AÜ, SBF Dergisi, Analik 1959, No.4.

Table 1 - AGRICULTURAL INVESTMENTS AND PRODUCTION.

	(Million T.L.)	
	1963	1967
Gross Investments	1.213.2	2.851.0
Production (1)	36.470.0	43.560.0

Source: First Five-Year Plan 1963-1967, pp.122, 124, From Table 50/1 and 52/1

Note: (1) Assuming that production in Agriculture is equal to agricultural income

Marginal propensity to Invest in Agriculture

$$= \frac{\Delta I}{\Delta P} \times 100$$

$$= \frac{1.637.8}{7.090.0} \times 100$$

$$= 23.1$$

Table 2 - Rate of Growth Plan Periods.

Turkey	7	(1963-67)
Israel	9.5	1962-66
Japan	7.8	1958-1970
Yugoslavia	11.3	1962-65
Egypt	7	1961-66

Source: Prof. Bhagwati -J. (OECD. Consultant in Turkey) "Some Reflections on the Critiques of the Turkish Plan" 4th May, 1964 (confidential)

It is stated in the Plan that in order to make the best use of the country's economic resources, certain public services must be given greater emphasis and priority than in the past. These services include the traditional public services such as transportation, power, irrigation. The investments in irrigation will be made by the Central Authorities while private enterprises will undertake some complementary investments to secure full benefits from the execution of irrigation works. i.e. the construction and maintenance of field channels, bunds, etc.

No doubt these basic services - infrastructure - require large capital and organisations and because they need a long "gestation" period, they cannot be productive within a short period. It is said that these are prerequisites for the investments to be made in productive sectors. But if maximising output is a criterion for allocating resources the specific recommendations of the plan give some reason for worry.

In the First Five-Year Plan the share of investment in GNP is expected to rise from 14 per cent in 1961 to 17 per cent in 1963 and 19.4 per cent in 1967. The average rate of investment for the plan period will be 18 per cent of GNP. In channelling the necessary resources to achieve the set target, capital/output ratio is used as a yardstick in the Growth Model.

a) CAPITAL-OUTPUT RATIO.

The capital-output ratio which is the reciprocal of marginal productivity of capital was accepted as 2.6:1 for the First Five-Year Plan. In calculating this ratio the planners took into account the capital - output ratio which was experienced in the last decade. The reason why this ratio has been a rather low compared with many other underdeveloped countries can be attributed to the past performance of the investment expenditure and their impact on the capacity of the overall economy.

The social overhead investments and infrastructure undertaken in the period, 1950-1960 were quite high and were especially in the field of transportation, hydroelectric power stations, education and health. It is believed that these will contribute more to the economy's productivity in the First Five-Year period because they will now be entering the production stage.

Secondly, the explanation of this low capital-output ratio is the presence of some excess capacity in the industrial sector at the beginning of the plan. These are textile, sugar and cement industries and particularly the ones operated by the State Economic Enterprise.<sup>(1)</sup>

Thirdly, it is hoped that better techniques, better organisation and management and, more efficient utilization

---

(1) First Five-Year Development plan, 1963-1967, SPO.p.126.

of productive capacity would be used in the plan period. Another consideration which made the planners select this capital/output ratio was the usage of this rate in Countries which have similar economic and social natures.<sup>(1)</sup>

The capital-output ratio is expected to rise in the second Five-Year plan with a further economic expansion which will be continued in that period.

It would be absolutely wrong to assume capital/output ratio as a rigid one and the relation between these two aggregates as automatic. Some authors have opposed such dogmatism and suggested the "diminishing importance of capital"<sup>(2)</sup> It is true that not only capital itself, but other factors as well such as improvement in labour skill, choice of techniques (labour or capital intensive technique), better organisation and management play a large part in productivity increase. Thus we feel that it would be feasible to think of capital-output ratio as covering the effects of all of these factors as well.

#### b) DOMESTIC SAVINGS.

Against the increase in investment target, the ratio of domestic savings to income is expected to rise from 12.9 per cent in 1963 to 16.5 per cent in 1967. (See Table 4 a)

The increase in domestic savings is related to the increase in

---

(1) Ibid,p. and also see, Prof.Yalsin,A."Bes Yillik planin Genel GÖrünüü", SBFD.p.

(2) See, Clark,C. The Diminishing Importance of Capital, The Listener, 1945.

per capita income and to the possibilities of restraining the increase in consumption out of additional incomes. The realisation of the increase in domestic savings would imply a marginal savings/income ratio of 26.5,<sup>(1)</sup> a ratio which is much higher than the one in the past. (Marginal domestic saving, on average, was 16.5 for the period 1957-1960).

The average increase in the ratio of domestic savings to GNP is 2.6 while the actual increase between 1962 and 1967 is 4.3. Therefore one may say that this is not a modest target in terms of the sacrifice required from a nation with a low standard of living and a high rate of population increase. But this is a target which could be achieved without putting undue strain on the people if implemented with proper economic and social policies.

As can be seen from the table, private consumption has been projected to be reduced from 71.8 per cent of GNP in 1963 to 67.9 per cent in 1967. Though the feasibility of this attitude could not be questioned, there remains the fact of what sort of measures have been directed toward this target and whether they will indeed be sufficient to restrict this very high rate in private consumption.

---

(1) Marginal Savings/Income ratio is presented in Table 4.a.

Table 3 - INVESTMENT AND RESOURCES.

Years	G.N.P.		Investment	Investment as % of G.N.P.	Current Account Deficit		Domestic Savings		Domestic Savings as % of GNP.
	G.N.P.	Investment			As% GNP	As% GNP	Domestic Savings	Domestic Savings as % of GNP.	
1957	30.5	4.0	13.1	0.2	0.7	3.8	12.4		
1958	36.1	5.0	13.9	0.3	0.8	4.7	13.1		
1959	44.7	7.0	15.7	1.4	3.1	5.6	12.6		
1960	49.0	7.8	15.9	1.2	2.4	6.6	13.5		
1961	49.2	7.5	15.2	1.4	2.8	6.1	12.4		
1957-1961 Average			14.8		2.0		12.8		
1963-1967 Average			18.3		3.5		14.8		

( Billion T.L. at current price

Source: S.P.O. First Five-Year Development Plan, 1963-1967, Ankara, 1963.p.108.

Table.4. RESOURCES AND THEIR USE.

	Billion T.L., 1961 prices.			
	1962	1963	1965	1967.
1. G.N.P.	52.7	56.4	64.5	73.9
2. External deficit	2.1	2.3	2.2	2.1
3. Available resources(=2+1)	54.8	58.7	66.7	76.0
4. Public revenue from internal sources(=1-9)	10.6	12.1	14.4	17.8
5. Current public expenditures	7.6	8.6	9.5	11.5
5a.of which: development Expenditures	2.1	2.6	2.9	4.1
6. Public savings(=4-5)	3.0	3.5	4.9	6.3
7. Public investment	5.1	5.8	7.1	8.4
8. Excess of public investment over public savings (=7-6)	2.1	2.3	2.2	2.1
9. Gross Private income	42.1	44.3	50.1	56.1
10. Private consumption	38.6	40.5	45.4	50.2
11. Private gross savings(=9-10)	3.5	3.8	4.7	5.9
12. Private gross investment	3.5	3.8	4.7	5.9

Source: O.E.C.D, Turkey May, 1963, p.16.

Table 4 a) AVERAGE AND MARGINAL DOMESTIC SAVINGS.

(Billion T.L.)

Years	G.N.P.	Total Investment	Current Acc. Deficit	Domestic Savings	DS / GNP	$\frac{\Delta DS}{\Delta GNP}$
1962	52.7	8.6	2.1	6.5	10.4	-
1963	56.4	9.6	2.3	7.3	12.9	21.6
1964	60.3	10.8	2.5	8.3	13.7	25.6
1965	64.5	11.8	2.2	9.6	14.8	30.9
1966	69.0	13.1	2.2	10.9	15.7	28.
1967	73.9	14.3	2.1	12.2	16.5	26.5

Note: This table is arranged from the figures given in Table 17 in Chapter 4. Domestic savings are calculated by deducting current Account deficit from total investments given for each year. Marginal average propensity to save is found to be 26.5

In order to maintain 2.4 per cent increase per head in private consumption against 4 per cent net increase in GNP the planners have suggested the following measures: <sup>(1)</sup>

a) Fiscal revenues from taxes would be raised. These would be through higher tax rates and through introduction of new taxes (i.e. agricultural income tax)

b) Other public revenues would increase more rapidly than the GNP. Average rate of increase 7.3 per cent is mostly due to the full utilization of excess capacity and re-organisation of the State Economic Enterprises. (see table 17)

c) Finally, some incentives for private savings would be created in order to absorb the increases in disposable incomes.

According to our calculations private savings <sup>(2)</sup> which constitute 8.3 per cent of gross private income in 1962 will increase to 10.5 per cent in 1967. (See, Table below). This means that private savings will rise by 26.5 per cent over six-year period (1962-67). It is clear that voluntary savings can be expected to rise if there is a greater propensity to save. Our findings which are based on the figures collected from Table 17 and 18, indicate that marginal private savings will be 16.9 (on average) for the period 1962-1967. It is difficult to find propensity for the last decade owing to the lack of data.

---

(1) See, OECD, Turkey, May 1963, P.15 and, also see First Five-Year plan 1963-1967, p.435.

(2) Private savings are derived by deducting private consumption from total private income.

One may feel that 16.9 per cent marginal private savings is fairly good rate to contribute to capital accumulation but it will be very necessary to restrict the very high private consumption.

Table 5- PRIVATE INCOME, CONSUMPTION AND SAVING(Average and Marginal)

(Billion T.L.)

Years	Disposable Private Income	-	Private Consumption	=	Private Savings	$\frac{PS}{PI}$	$\frac{\Delta PS}{\Delta PI}$
1962	42.1	-	38.6	=	3.5	8.3	-
1963	44.3	-	40.5	=	3.8	8.5	13.6
1964	47.2	-	43.0	=	4.2	8.8	13.7
1965	50.1	-	45.7	=	4.7	9.3	17.2
1966	52.9	-	47.6	=	5.3	10	21.4
1967	56.1	-	50.2	=	5.9	10.5	18.7

Note: This Table is arranged according to the figures given in table 17 and 18. Disposable private income is found by deducting taxes plus public revenue from the GNP and by adding current account deficit. Then private saving is derived by deducting private consumption from disposable private income. The marginal private saving, on average, is 16.9 for the period 1963-1967.

Again according to our findings per capita savings deposits (private) will increase from \$ 14 in 1963 to \$19.6 in 1967.<sup>(1)</sup> This is not very high figure compared with some underdeveloped countries. (i.e. in Greece it was \$17 in 1957 and \$46.8 in 1960)

In order to accelerate private savings the Government should raise interest rate paid to savings and time deposits as well. Greece received a spectacular increase in private household savings due to raising interest rates paid both to savings and time deposits in 1956.<sup>(2)</sup> At the same time it will be necessary to issue development bonds and to float them in the market as over-subscribed.

It is stated in the plan that measures will be taken to form a capital market but, this would not be easy if confidence in economic and political life cannot be ensured. Also, an increased faith in Turkish lira is an important issue and the Authorities should try to sustain confidence in the currency by avoiding inflationary conditions.

One may conclude that the housing market will persist to be the largest single competitor to private household savings in the absence of a really active stock-market.

- 
- (1) Population is assumed to be 30.000.000 in 1963 and 33.200.000 in 1967 (given 800.000 net increase in population per annum, on this point, see, OECD, Turkey May, 1963, p.9.)
- (2) Interest rates paid to time deposits was 10 per cent in 1956. See Statistical Yearbook of Greece, 1958, 59. Bank of Greece.

II-EXPANSION IN AGRICULTURAL PRODUCTION AND HIGH PRODUCTIVITY  
IN INDUSTRY.

The second target is the achievement of self-sufficiency in food grains and an increase in other agricultural production with a view to expanding exports and the requirements of industry for raw materials. Thus fostering industrialisation.

Experience in many underdeveloped countries has shown that food forms one of the strategic elements in the growth process. In an economy where marginal propensity to consume is high, and where a good proportion of additional incomes is spent on food, the generation of new incomes as a result of stepping up investment places a strain on food supplies over and above the expansionary impact of a rising population.

The present population increase would require an increase in agricultural output of 3 per cent per annum at least to keep pace with the number of people to feed and obviously more if nutritional levels are to be improved and exports to be increased.

According to the Plan projection, annual rate of growth of agriculture will be 4.7 per cent, of industry (including mining, manufacturing and energy) 11 per cent, and of transport and communication 9.6 per cent. (see, Table 6)

Table 6 - Production Targets.

(Million T.L. at 1961 prices)

Sectors.	1962	1963	1967	1967 index 1962=100	Annual rate of Growth.
Agriculture	34690.0	36470.0	43560.0	125.6	4.7
Mining & Quarry.	2341 .4	2583.9	3577.4	152.8	8.7
Manufacturing.	18203.5	20867.1	31462.1	172.8	11.5
Energy	648.0	729.1	1187.7	183.3	12.8
Transport and Communications.	3378.2	3744.9	5340.2	158.1	9.6
<b>Total</b>	<b>59261.1</b>	<b>64395.0</b>	<b>85127.4</b>	<b>143.7</b>	<b>7.5</b>

Source: First Five-Year Development Plan 1963-1967, p.124.

Output per man year and yields per hectare in cereals and others have been very low and have shown little progress since the 1950's. Although some progress in agricultural technique was taking place during the last decade, agriculture in many parts of the country remained backward.

Therefore, agriculture in the First Five-Year Plan has received adequate attention in order to increase the productivity in it and to meet industry's requirements of raw materials. Planned total investment in agriculture will rise from 1.2 billion T.liras in 1963 to 2.8 billion liras in 1967. The largest part of this steep rise in investment is accounted for by irrigation works. It is

quite encouraging to see that investment in new irrigation scheme will increase from 340.7 million liras to 1.503.6 million liras over the plan period (a 341 per cent increase). However investment in land improvement will rise from 50.0 million T.L. to 120.0 million in the same period.<sup>(1)</sup> The projection of the latter does not seem satisfactory to obtain higher yields from agriculture.

The composition of agricultural production in the First Five-Year Plan is presented in Table 7.

Table 7 - Composition of Agricultural Production (percentage share of major groups of products within Gross Total production.

Groups of Products.	1962	1967	production Index 1962=100
Cereals	23.1	21.3	115
Pulses	2.0	2.8	175
Animal Food	15.1	13.7	114
Fruit & Vegetables	19.7	19.5	125
Industrial Crops	10.6	11.6	132
Livestock Products	26.5	27.7	131
Forestry Products	2.4	2.6	138
Fishery Products	0.6	1.3	280
Total	100.0	100.0	125.6

Source: First Five-Year Development Plan 1963-1967, p.132

(1) Ibid. p.147. Table.59.

The highest share in the gross total agricultural production is by livestock products, cereals, and fruit and vegetables at 26.5 per cent, 23.1 per cent and 19.7 per cent respectively.

But during the plan period the highest production increase is expected to be in fishery products which has previously been grossly neglected. Production from fishing will be tripled between 1963 and 1967. Taking into account that Turkey has much richer fish reserves in coastal and inland waters than her neighbours (Greece, Syria, Lebanon,...), this sector must receive due encouragement.

According to the plan investment in fishery will be more than double increasing from 37.0 million T.liras in 1963 to 84.3 million in 1967. If this investment can be rationally directed into the right fields like fishing vessels and equipment, storage facilities, distribution, and research and training, much can be expected from this sector. It has been made clear in the plan that large credit facilities will be created for fishing.

Cereals and Livestock products which both represent the highest share in the total agricultural production, will show a small change over the plan period. (See, Table 7). It seems to us that the country will be forced to import food grains from abroad as it did in 1961 (\$53 million),<sup>(1)</sup> if

---

(1) See, OECD, Turkey, Paris, May, 1963, p.34.

necessary measures are not taken to increase agricultural productivity per hectare and per labour.

The importance of keeping food prices in check through adequate food supplies is well recognised by the Turkish Authorities, in fact it has been felt that the levels of investment can be stepped up only in relation to the availability of food.

The primary agricultural objective is not merely the provision of adequate food supplies to obtain self-sufficiency; equally important is the provision of adequate supplies from non-food agricultural production. As Turkey's industrial growth progresses its demand for industrial raw materials will also expand. For a long time to come Turkey will have to depend on its traditional exports of tobacco, fruits, cotton and ores as well as other minor agricultural products; it will be essential for its textile and sugar industries to be adequately supplied with domestic raw materials.

Industrial crops will show a rise of 32 per cent between 1962 and 1967 which is indeed unsatisfactory. Cotton production is estimated to increase by 31.2 per cent during the plan period, due to the expansion of irrigated areas and other investments and measures.<sup>(1)</sup> By 1967, 57 per cent of the area sown to cotton will be irrigated and fertilized. At

---

(1) First Five-Year Plan 1963-67, p.141.

present, 38 per cent of the total area devoted to cotton is being irrigated, and in order to reach the target set, complementary irrigation investment, must be undertaken by the farmers concerned.

On the other hand sugar beet production will increase from 2.666 thousand tons in 1963 to 3.266 thousand tons in 1967 (a 22 per cent increase) See, Table 8.

Table 8. Production Projection for Main Agricultural Products  
(Thousand tons)

Products.	1962 <sup>(1)</sup>	1963	1967
Wheat	8,030 <sup>(2)</sup>	8,200	9,000
Barley	3,444 <sup>(2)</sup>	3,576	3,988
Maize	960 <sup>(2)</sup>	1,037	1,454
Rice	115	149	230
Sugar Beet	2,700	2,666	3,266
Tobacco	135	135	150
Cotton	200	205	269
Potatoes	1,400 <sup>(2)</sup>	1,750	2,000
Tea	32	32	63
Pulses	400	416	495
Oranges	-	264	355
Peaches	86	93	120
Figs	52	55	64
Apples	249	261	309
Hazelnuts	86	95	130
Grapes	2,972	3,061	3,417
Vegetables	3,240	3,410	4,092
Olives	465	486	570
Milk	3,045	3,210	3,857
Eggs	611	777	1,037
Industrial Timber.	2,800	3,000	4,400
Wood for fuel (1000 $\overset{3}{m}$ )	10,500	10,500	10,500

Source: S.P.O. First Five-Year Plan, p.137.

(1) 1962 Production estimates.

(2) 1956-1960 average

The problem in agriculture is not only to raise agricultural production but, also of releasing adequate supplies from the rural sector to the rest of the economy. The problem here takes the character of saving and capital accumulation. No doubt the mobilization of sufficient surpluses from the agricultural sector is basic to the problem of economic development.

Turkish agricultural policy which exempted the farmers from tax payments in the last 14 years and the Government Price Supporting Programme for cereals, has encouraged them to extend their cultivable land through big reductions in grazing land and through deforestation; where as intensive farming was extremely neglected. Therefore productivity increase in agriculture is essential for Turkey because a rapid expansion of agricultural production provides a firm base for a greater growth in the rest of the economy. There is a great need to correct the structural weakness of the economy which relies too heavily on agriculture.

#### PRODUCTIVITY.

There is no projection of the productivity increase expected in the First Five-Year Plan in agriculture and industry. However from Table 9 and 10, we can find out productivity for 1962 and for the end of the plan period.

Changes in productivity are measured by per capita income by dividing output in each sector by the labour force in the same sector. According to our calculations based on these tables, productivity increase in agriculture over the period 1962-1967 will be 15 per cent or in other words it will be 1.1 times the level in 1962.

Industry, on the other hand, will show a 26 per cent increase in productivity during the same period which nearly twice the increase in agriculture. But this implies that per annum (on average) productivity in industry is 4.3 per cent while in agriculture is 2.5 per cent.

We can conclude from our findings that productivity in industry will still remain 3.3 times the productivity in agriculture. (See, Table 11).

Table 9 - Value Added.

(Million T.L. at 1961 prices)					
Sectors	1962	1963	1967	1967 index 1962=100	Annual rate of Growth.
Agriculture	23100.0	24030.0	28450.0	123.2	4.2
Mining and Quarrying	1711.6	1894.3	2669.2	156.0	9.3
Manufacturing	6748.1	7671.3	12398.0	183.2	12.9
Energy	434.0	490.5	803.5	185.1	13.0
Transport and Communications	2047.3	2318.1	3370.7	164.7	10.5
TOTAL.	34020.6	36565.5	47513.4	139.7	6.9

Source: S.P.O. First Five-Year Development plan, 1963-1967, p.125.

Table 10. - Breakdown of Active Population by Sector.

Sectors	(In Millions)							
	1962	1963	1964	1965	1966	1967	1972	1977
Agriculture	9.86	10.00	10.14	10.28	10.42	10.56	10.86	11.16
Industry	1.25	1.34	1.44	1.54	1.65	1.77	2.36	2.99
Services	1.63	1.78	1.94	2.12	2.31	2.52	3.64	5.05
TOTAL.	12.74	13.12	13.52	13.94	14.38	14.85	16.86	19.20

Source: S.P.O. First Five-Year Development Plan, Ankara, 1963, p.400

Table 11 - Productivity in Agriculture and Industry.  
(T.Liras)

Sectors	1962	1967
Agriculture	2342.7	2694.1
Industry.	7115	8966

Note: Table 11, is based according to our findings from Table 9 and 10.

This low level of productivity in both sectors is due to the high level of unemployment in agriculture (disguised unemployment included) and to the large absorption of unemployed labour by industry from agriculture.

Therefore, the First Five-Year plan does not seem to visualise a high rate of productivity because of the unemployment problem pressing hard on the economy. The criteria of maximizing output cannot be assumed to be applied.

It may be said that this method of finding productivity is unsatisfactory taking into account the large pockets of unemployment and disguised unemployed in each sector. Nevertheless, it can serve our purpose by giving a rough idea about the productivity expected during the plan period.

### III - EMPLOYMENT AND THE ACTIVATION OF IDLE MANPOWER.

The aims of the First Five-Year plan as regards employment can be summarized thus, an effective solution must be found to the problem of unemployment, and the imbalance in the

distribution of the active population among various sectors must be rectified.<sup>(1)</sup>

The discrepancy between the volume of employment to be created and the manpower supply leads to disguised unemployment in agriculture and open unemployment in other sectors.

As can be seen from Table 13, unemployed people were 1.3 million in 1963 and this number is expected to decrease to 0.9 million at the end of the First Plan. There is no data for disguised unemployment in each sector except for agriculture it is stated that disguised unemployment is around 1 million even at peak season.<sup>(2)</sup> Even in agriculture disguised unemployment gives way to open unemployment beyond a certain saturation point. (See Table, 12.)

Table 12 - Distribution of Surplus Population in Agriculture  
(by months of peak and lowest activities)  
(In Thousands)

Years	July	January.
1955	400	7.400
1960	800	8.300

Source: First Five Year plan, p.400.

(1) First Five-Year plan, op.cit.p.397.

(2) Ibid, p.33.

Given the assumption that the rate of growth of the agricultural population will remain unchanged, unemployment in the next 15 years is expected to be as shown in Table, 13.

Since the net annual increase of the labour force is 260.000<sup>(1)</sup> and current unemployment at the beginning of the plan is 1.300.000, the expected employment creation of 340.000 per annum (or in other words 13 per cent increase in employment to be created over 5 years against 9.3 per cent increase in the total labour supply), will not be able to solve the problem of underemployment. And at the end of the Plan period, 1967, the unemployment figure will stand as 0.9 million. Furthermore, it is not likely that unemployment will be avoided until the end of the Fifteen Year Development Plan.

It is stated in the First Plan that the solution to the question of agricultural labour surplus is to raise the volume of employment outside the agricultural sector. In the sector of services the plan finds the most important margins for labour absorption by 41 per cent increase over the plan period, while industry stands as a second by 32 per cent and agriculture by 5.6 per cent over the same period. (See, Table 10.)

---

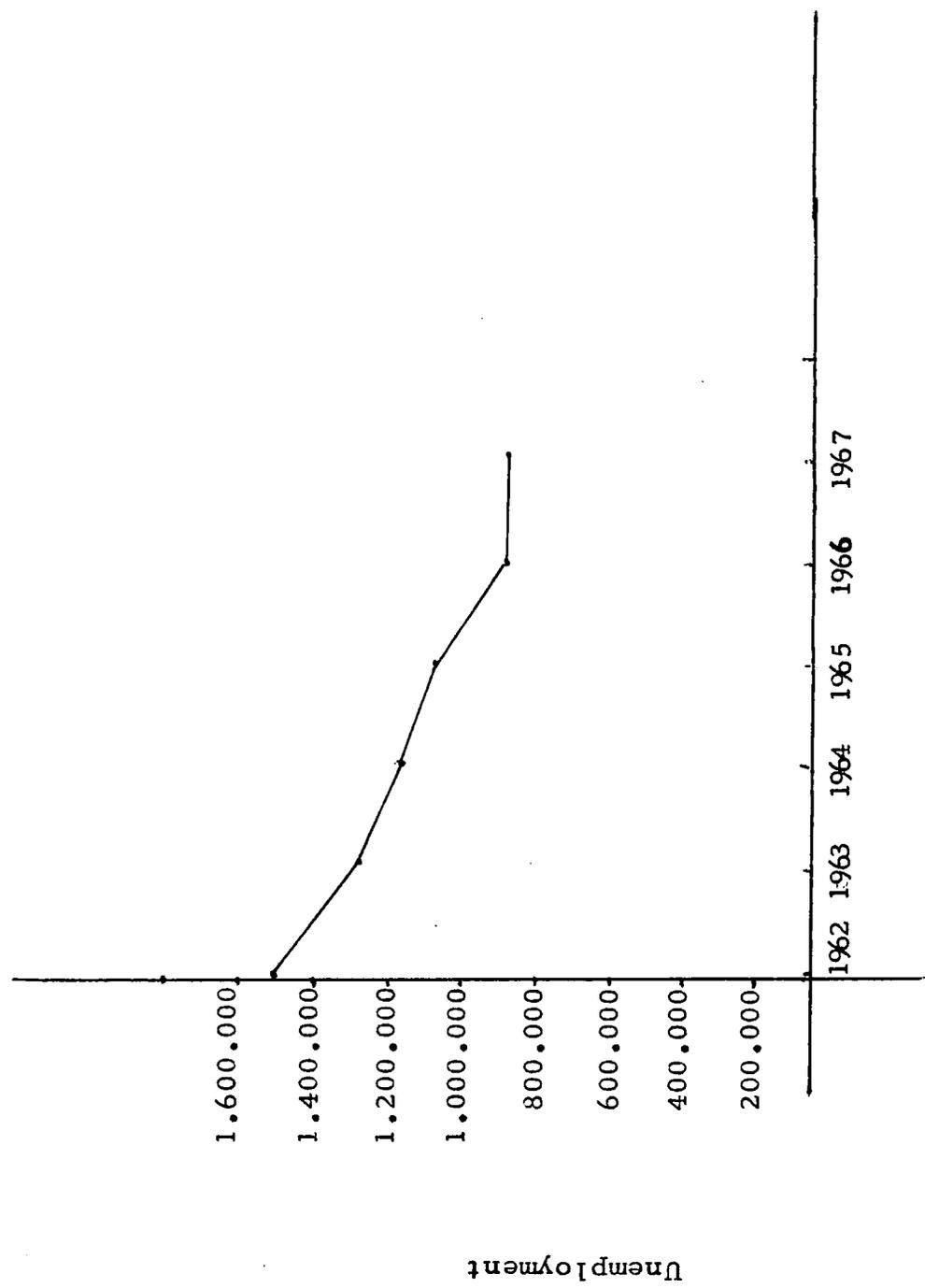
(1) This figure is calculated from Table 13.

Table,13 - Employment and Unemployment Levels

	(Million People)							
	1962	1963	1964	1965	1966	1967	1972	1977
15-64 Age Group	15.7	16.1	16.5	16.9	17.5	18.0	20.9	24.2
Labour Supply	14.2	14.4	14.7	15.0	15.3	15.7	17.6	19.9
Total Volume of Employment to be created	12.7	13.1	13.5	13.9	14.4	14.8	16.8	19.2
Unemployment	1.5	1.3	1.2	1.1	0.9	0.9	0.8	0.7

Note: The Labour Force is calculated according to the estimated number of working people in the 15-64 age group. Students, soldiers, the sick and infirm, prison inmates, and housewives who do not work are excluded from these estimates.

Source: S.P.O. First Five-Year Development Plan, 1963-1967, p.408.



But as can be observed from the above table, the employment opportunities to be created in industry and services by a 7 per cent rate of growth are not enough to ensure the absorption of labour surplus which exists in agriculture and the required distribution of manpower among the sectors. Therefore, Turkey should aim at a much higher rate of growth in order to solve its unemployment problem.

The measures suggested by the planners in this respect can be outlined in this way: <sup>(1)</sup>

1) - A large-scale increase in the non-agricultural activities in rural areas of the country. For this purpose, a better utilisation of rural labour and the prevention of excessive migration to cities have been proposed. This is said to be the main objective in the Community Development Programme.

2) The second measure of the plan is to give priority to employment creating projects and sectors. During the plan formulation priority is given to projects and sectors where labour-intensity results in the desired timing and quality of production without affecting costs. <sup>(2)</sup> But it is not explained how costs will not be affected while relying on labour-intensive projects. Also they have projected the higher employment into services in which they assume that

---

(1) First Five-Year Plan, pp.408,409.

(2) Ibid, p.409

productivity will rise slowly. This means that productivity increase has been sacrificed for the sake of employment.

3) Another measure included in the employment policy is to export the surplus manpower to West European Countries where manpower is needed. (1)

It is clear that the Government Authorities must be very careful not to allow the skilled manpower to be exported otherwise this will reduce the productivity expected from various sectors.

4) Finally the planners have stressed the importance of having a long-term population policy in which population growth should be reduced in order to achieve a balance between the increase of the labour force and employment created in different sectors. They also intend to set a higher rate of growth for the next plan periods, if the adopted measures do not bring about a satisfactory solution to the unemployment problem of the country.

The question is how far employment becomes a criterion in the resource allocation and how it can be reconciled in the allocation process with other important criteria.

In the Community Development Programme, it is stated that public works will be undertaken in the countryside for

---

(1) The workers sent abroad during 1961-1964 have reached 109.165 in total. Most of the manpower went to Germany and Netherlands (90.839 and 12.256 respectively) See, Economic Report, 1965. The Union of Chambers of Commerce, p.26

the purpose of reducing the underemployment in the agriculture and prevention of migration to cities. It is not made clear whether in this case other criteria of output and productivity will be sacrificed and what part of the resources will be devoted to this purpose.

One thing which does not seem to worry the planners at all is the employment in services in relation to the amount of employment in the "commodity" sectors of agriculture and industry. Several activities in the sector of services are very important to the Turkish economy, such as shipping and tourism. Moreover, there is another tendency to swell employment in middlemen's activities. While this sort of employment has good safety value for population pressures, it does not effectively raise the standard of living because it does not increase the production of goods. Nor is it likely to contribute very much to the long-term efficiency of an economy whose goal is a rapid industrial progress.

One may think that the planners should have tried to place available manpower where it can largely increase the flow of production of commodities rather than services.

#### IV - BALANCE OF PAYMENTS.

It is stated in the plan that "the aim of the Fifteen-Year Development plan is to move progressively towards balance in external payments and trade. Therefore, the

measures to be taken and investment to be made in the First Five-Year plan will only try to bring Turkey closer to this target" (1)

It is also believed by the planners that if the projections made for the First and Second Five-Year Plans are once realised, the country's development efforts can be fulfilled without resorting to any exceptional foreign aid.

One thing clear from the above information is that the First Five-Year plan will only be the first effort to reduce balance of payments deficit and promote exports in order to fill the gap, between exports and imports.

As stated in the plan the external deficit it would reach 2.3 and 2.5 billion T.liras in 1963 and 1964 and then decline to 2.1 billion liras by 1967. (a drop from 4.1 per cent of GNP to 2.8 per cent of GNP). See, Table 4 and 16.

Obviously this implies that a higher proportion of investment will be financed through domestic savings. Actually, 15 per cent of GNP will come from domestic sources while 3 per cent from foreign sources (it was 2 per cent of GNP in the period 1950-59). It is apparent that the planners have put more weight on the foreign sources than in the last 10 years. As a result of this, foreign sources' share in the gross investment will increase from 15 per cent in the period 1950-59 to 17 per cent during the First Five-Year plan.

---

(1) First Five-Year Plan, p.459.

The First Five-Year plan takes some measures with a view to promote exports, increase import substitution and to creating favourable moves in invisible items.<sup>(1)</sup>

#### A - IMPORTS.

According to the First Plan imports will rise from \$567 million in 1962 to 704 million in 1967 - a 24 per cent increase. However, given the 40 per cent increase in GNP during the plan period and high propensity to import,<sup>(2)</sup> the projection of imports seems to be underestimated.

The GNP and imports rose almost at the same rate during the period 1948-1960, but this period contained two different stages. While there was an investment boom from 1948-1954 imports rose 4 times as rapidly as GNP,<sup>(3)</sup> due to the increased imports of capital goods. In the second part of the 1950's when inflationary conditions prevailed in the country and there was a large drop in the foreign exchange reserves, the Government made some substantial import restrictions in accordance with the stabilization programme of August 1959. As a result of these measures, imports did not show any rise despite the fact that the GNP showed a 40 per cent increase.

---

(1) First Five-Year Plan, p.460.

(2) On this point, see, Chapter I.

(3) OECD, Turkey, May, 1963, p.23.

Therefore, taking into account past experience in the relation of imports and national product, it seems to us that the growth of imports will essentially depend upon the foreign trade policy followed during the plan period.

The projections of imports have been based upon the estimates of the required inputs of investment goods, raw materials and consumer goods. In all of these, import substitution has been taken into account and is expected to show 315 per cent increase over the plan period. Yet this expectation seems an unrealistic one in view of the fact that enormous imports are needed to create these import substitution industries.

Table 14 - Import Projections. (Million \$ )

Imports	1963	1964	1965	1966	1967
Investment goods	241.1	274.1	296.0	332.5	363.0
Raw Materials	234.5	261.5	299.5	325.0	363.5
Consumer Goods	71.4	76.4	84.5	87.4	93.5
<u>TOTAL</u>	547.0	612.0	680.0	744.9	820.0
U.S. Agricultural Surpluses	60.0	60.0	60.0	60.0	50.0
<u>TOTAL</u>	607.0	672.0	740.0	804.9	870.0
Import Substitution.	40.0	-45.0	-110.0	-130.0	-166.0
Total Import Requirements.	567.0	627.0	630.0	674.9	704.0

Source: S.P.O. The First Five-Year Plan, p.468.

Import projections were examined under three main groups, capital goods, raw materials and consumer goods. After gross import requirements were calculated, the import replacement values were deducted from it.

During the Five-Year Plan, investment goods are expected to rise by 50.5 per cent, while raw materials and consumer goods by 55 per cent and 30.9 per cent respectively. The projections of investment goods and raw materials have been underestimated considering the fact that the country is trying to expand and accord a rapid industrialisation. On the other hand, one can easily object to the projection of consumer goods on the grounds that it is high for consumption goods industries are highly progressed in the country. Besides, the inclusion of luxury goods can not be favoured.

The planners have been very optimistic and ambitious in seeing a large scope in import substitution goods which are expected to increase from \$40 million in 1963 to 166.0 million in 1967.

Our doubt stems from whether in so short a space of time Turkey will be able to achieve the projected substitution of domestic products for imports.

#### B - EXPORTS.

In regard to export projections the planners have expected exports to increase from \$347.8 million in 1963 to

\$457.2 million in 1967. See Table, 15. This amounts to saying that exports will rise by 31.4 per cent against 24 per cent rise in imports over the plan period.

This rate of growth in exports may not seem to be an extraordinary figure by itself, but the question which remains is whether Turkey will be able to get over the obstacles which were against its exports during the last decade.

The items which are expected to show most rapid increases are livestock products (including hunting and fishery), and industrial products, the former being increased by 72 per cent and the latter approximately by 47 per cent from 1963 to 1967. Agricultural products in general which represent 77 per cent of the total exports in 1963, will drop to 76 per cent.

While the targets for livestock products and industrial products may appear to be optimistic, the absolute magnitude of the increase in both groups is rather modest.

Achievement of the plan will require a very large exports effort and it is encouraging to see that the Authorities have given greater consideration to the promotion and diversification of exports items. The measures indicated in the plan, are the standardisation of export commodities, the creation of storage and packing facilities, market research, sales organisation and foreign publicity.<sup>(1)</sup>

---

(1) OECD. Turkey, May, 1963, paris, p.24.

In addition to these, fiscal incentives for exporters have been covered in the plan.

Table 15 - EXPORTS PROJECTIONS.

	Million \$				
	1963	1964	1965	1966	1967
<u>Agricultural Products.</u>	269.8	291.2	298.0	329.5	348.5
a) Cereals, pulses and food crops	17.8	18.2	18.6	19.0	19.4
b) Fruit & Vegetables.	84.2	93.7	86.5	103.5	105.4
c) Industrial crops and forestry products.	131.0	138.2	146.1	152.9	160.7
d) Livestock, hunting & fishery.	36.8	41.1	46.8	54.1	63.4
<u>Industrial Products.</u>	56.0	60.9	71.5	73.4	82.3
<u>Mine &amp; Quarry Products.</u>	22.0	22.2	24.0	24.3	26.0
<b>TOTAL.</b>	<b>347.8</b>	<b>374.3</b>	<b>393.5</b>	<b>427.2</b>	<b>457.2</b>

Source: S.P.O. First Five-Year Plan, p.469.

An export policy which composes all of these measures may be welcomed, if they can ensure full exploitation of Turkish exports. But one thing which is not clear is whether the Authorities have taken into account the small elasticity of foreign demand for exportable goods. Under that condition, a noticeable improvement in the balance of payments will depend essentially on the development of new export industries.

Relying on exports of agricultural and mining products will not increase foreign exchange earnings of the country, because the former will be largely dependent on unpredictable weather conditions and the latter on the changes in the economic situation in industrialised countries.

Balance of payments projections show that neither the trade nor the current deficit will record any significant change from 1963 to 1967. Because imports as a proportion of GNP will decline from 9.4 per cent in 1963 to 8.5 per cent in 1967, this may imply that the First Five-Year plan is directed towards protected development of national industry. However, in Turkey's conditions, a policy to protect and encourage internal industry is the only way open to her industrial growth.

One may also add that many efforts to improve and expand exports are needed particularly through establishment of new export industries. i.e. textile, sugar, fishing, petroleum and olive oil.....

#### C - INVISIBLES.

Tourism, among the invisible items, has received the largest attention in the plan. The projected receipt from tourism will rise from \$ 13 million to \$ 48 million at the end of the plan (a 269 percent increase over 5 years). The rate of growth of tourist receipts (53 per cent per annum)

is quite excessive, but as the experience of other countries has already shown, this sector can be extremely dynamic.

Actually, it is surprising to notice net invisibles (other than interest payments) showed a deficit of \$13 million and \$25 million in 1963 and 1964. In Turkey there is a large unexploited potential given the marked growth of European tourism. In 1963, noticeable progress was made in the construction of hotel accomodation<sup>(1)</sup> but, this was not satisfactory to exploit this industry which shows very promising prospects in the plan period.

Tourism expenditures according to the plan will rise from \$20 million in 1963 to \$28 million in 1967<sup>(2)</sup>. But the level of investment in tourism is not kept at a level to achieve the projected revenue from it. A much higher level of investments in tourism and publicity campaigns abroad would be needed.

Also the number of workers gone to Europe has reached a significant level.<sup>(3)</sup> Some measures were taken to attract their remittances, but these measures have not shown a significant effect so far. One may think that existing regulations are not of the kind to attract these foreign currency earnings to official channels. Bearing in mind the critical position of the balance of payments it is quite necessary to review these regulations.

---

(1) OECD, Turkey, August, 1964, p.35.

(2) See, First Five-Year Plan, p.469.

(3) The number of Workers in Europe in 1964 was 109.165..

D - FOREIGN DEBT.

The Turkey's debt in foreign currencies is about  
 (1) \$1 billion of which \$567 million will fall to the First Five  
 Year Plan. But, if the interest payments on debt (\$99 million)  
 be added to this figure, Turkey's foreign debt obligations  
 amount to 666 million dollars. (See, Table 16) The foreign  
 debt to be repaid, including principal and interest, amounted  
 to \$114 million in 1963 and to \$110 million in 1964. (2)

The terms and conditions of foreign aid have great  
 importance in the case of Turkey. Firstly, a great proportion  
 of aid are tied to deliveries from the donor country which,  
 beyond a certain point, this results in distortions of the  
 pattern of imports, and in higher costs. (3) Also given the fact  
 that a large part of foreign aid are tied to specific  
 projects this creates a difficulty in programming imports of  
 raw materials, spare parts and etc... Thirdly, some of the  
 foreign aid received from International economic organisations  
 (i.e. the European Fund, IMF.) are rather short term which  
 are not appropriate for financing economic development.

Therefore, high rates of interest and unfavourable  
 repayment periods of these aids would naturally exert a  
 heavy burden on the economy if Turkey's current balance of  
 payments is not improved substantially.

---

(1) OECD, Turkey, May 1963, p.25.

(2) See. OECD, Turkey, August 1964, p.24. Table 8. The figure for 1964  
 is a forecast.

(3) OECD. Ibid, p.40.

According to the figures of 1963 the deficit in the trade balance exceeded its revised estimate by \$50 million due to increase in imports (revised estimate as \$269 million and actual figure as \$319.5)<sup>(1)</sup> But the deficit in the "invisibles" showed a marked decrease compared with its 1963 projection. The deficit in the invisibles dropped from \$67 million to \$9 million which resulted partly from a decrease in the transfer of profits of the private foreign capital and partly from the item called "other invisibles"<sup>(2)</sup> However there has not been any significant change in the tourism revenues in 1963 as compared with the previous year.

While Turkey will be in need of substantial inflow of foreign aid<sup>(3)</sup> during the plan period to increase productive investment and to keep it at a sufficient level, and to reduce the balance of payments deficit, it must however, be realised that unfavourable inflow of foreign aid (with deficiencies we have mentioned above) must be avoided.

#### V - SOCIAL TARGETS OF THE DEVELOPMENT PLAN

The plan states, "the economic development of Turkey, as stated in the plan strategy, will follow a course compatible with the principles of social justice. The most important principles governing development targets are the attainment of an adequate standard of living for the people, social

---

(1) Planning in Turkey, SPO, No.2, Ankara 1964, pp.17,18.

(2) Ibid, p.18.

(3) The grants and credits received from the consortium in 1963 reached \$176.9 million. Ibid, p.17.

security and fair distribution of income and equality of opportunity in the widest sense of the term. In other words the basic concept of development is to provide as large a proportion of the population as possible with higher standards of living and with social security"<sup>(1)</sup>

Therefore it is well recognised that the First Five-Years will be a base for the achievement of long-term social objectives.

---

---

(1) First Five-Year Development Plan, p.43.

TABLE 16 - BALANCE OF PAYMENTS PROJECTIONS.

	Million \$					Total of 5 years.
	1963	1964	1965	1966	1967	
Imports (c.i.f.)	567	627	630	675	704	3,203
Exports (f.o.b.)	348	374	394	427	457	2,000
<u>Balance of Trade</u>	-219	-253	-236	-248	-247	-1,203
Tourism & travel receipts	13	18	25	35	48	139
Tourism & travel expenditure	-20	-21	-23	-25	-28	-117
Private Profit transfers (Net)	-15	-17	-20	-25	-30	-107
Payments of debt interests	-28	-24	-29	-16	-12	-99
Other invisible items (net)	-29	-25	-20	-20	-20	-114
Invisible items (Net total)	-79	-69	-57	-51	-42	-303
Infrastructure and "off shore receipts.	47	49	51	53	55	255
<u>Current Accounts.</u>	-251	-273	-242	-246	-235	-1,246
Foreign debt payments	-148	-99	-164	-80	-76	-567
PL 480 shipments	60	60	60	60	50	290
private Foreign capit.	25	25	25	25	25	125
Other Capital Imports	349	322	356	276	270	1573
<u>Total Capital Movements</u>	434	407	441	361	345	1,988
Net error, omission and reserve changes	35	35	35	35	35	175

Source: SPO. First Five-Year Development Plan, 1963-67, p.467.

TABLE 17- 1963-1967 EXPENDITURE TARGETS.

Years	GNP	Private Consumption	Private Investment	Current public Expenditure	Public Investment	Current Account Deficit	Total Investment
1962	52.7 =	38.6+	3.5 +	7.6 +	5.1 -	2.1	8.6
1963	56.4	40.5	3.8	8.6	5.8	2.3	9.6
1964	60.3	43.0	4.2	9.0	6.6	2.5	10.8
1965	64.5	45.4	4.7	9.5	7.1	2.2	11.8
1966	69.0	47.6	5.3	10.5	7.8	2.2	13.1
1967	73.9	50.2	5.9	11.5	8.4	2.1	14.3
AS % OF GNP.							
1962	100	73.2	6.0	14.4	9.7	4.0	16.3
1963	100	71.8	6.7	15.2	10.3	4.1	17.0
1964	100	71.3	7.0	14.9	10.9	4.1	17.9
1965	100	70.4	7.3	14.7	11.0	3.4	18.3
1966	100	69.0	7.7	15.2	11.3	3.2	19.0
1967	100	67.9	8.0	15.5	11.4	2.8	19.4
AVERAGE ANNUAL INCREASE (%)							
	7.0	5.4	11.0	8.7	10.6		10.7

Source: S.P.O. First Five Year Development Plan, 1963-1967. Ankara, 1963, -p. 108.

TABLE 18 - 1963 - 1967 REVENUE TARGETS.

(Billion T.L. at 1961 prices)

Years	GNP	Taxes	Other Public Revenue	Private Income	Current Account Deficit	Total Public Revenue	Private Income	Current Account Deficit.	
1962	52.7 =	7.7 +	5.0 +	42.1 -	2.1 =	12.7 +	42.1	2.1	
1963	56.4	9.0	5.4	44.3	2.3	14.4	44.3	2.3	
1964	60.3	10.1	5.5	47.2	2.5	15.6	47.2	2.5	
1965	64.5	10.9	5.7	50.1	2.2	16.6	50.1	2.2	
1966	69.0	11.8	6.5	52.9	2.2	18.3	52.9	2.2	
1967	73.9	12.8	7.1	56.1	2.1	19.9	56.1	2.1	
				% OF G.N.P.					
1962	100	14.6	9.5	79.9	4.0	24.1	79.9	4.0	
1963	100	16.0	9.6	78.5	4.1	25.5	78.5	4.1	
1964	100	16.7	9.1	78.3	4.1	25.8	78.3	4.1	
1965	100	16.9	8.8	77.7	3.4	25.7	77.7	3.4	
1966	100	17.1	9.4	76.6	3.2	26.5	76.6	3.2	
1967	100	17.3	9.6	75.9	2.8	26.9	75.9	2.8	
				AVERAGE RATE OF INCREASE.					
	7.0	10.8	7.3	5.9		9.4		5.9	

Source: SPO, First Five-Year Development Plan, 1963-1967, p.111.

PART III

---

CHAPTER V.

THE PATTERN OF INVESTMENTS AND RESOURCE

ALLOCATION.

## I - GENERAL APPROACH.

It is stated in the First Five-Year plan that "The Turkish Economy is a mixed economy where public and private sectors function side by side". The main objective of the development policy is to attain a balanced rate of growth of 7 per cent and to achieve a just distribution of benefits resulting from the sacrifices required for development. It is also said that the public and private sectors have been taken into consideration as the two component parts of a whole, and not as two separate sectors with clashing interests.

In formulating total investment projects, special attention has been paid to indicate the investments to be made in each sector by both the state and private enterprise. The investment targets and projects will be shown in the annual programmes. In the technique of planning the minimum volume of private investment required in each sector has been specified accordingly. It is clear that this will enable the planners to reajust the public sector in the light of the investments to be made by the private sector.

In order to avoid the collapse of the plan's targets, the state or public enterprises will correct their investment programmes to ensure the fulfillment of those targets, if the private sector does not invest in a field

which is necessary from the standpoint of planning. Public enterprise has played a dominant role in this respect.

The establishment of mixed enterprises has been ruled out because they are assumed to be a wasteful and uneconomic use of public resources. However the only exceptions to this are the mobilizing private savings and the encouragement of foreign capital.<sup>(1)</sup>

The mixed economy approach has been regarded as the main principles and its "rules of the game" will be observed.<sup>(2)</sup> Given the weak character of private initiative, more than half of total investments will be undertaken by the public sector which is believed to be justifiable. But it must be borne in mind that an extreme expansion of this sector might discourage private initiative and distort the economic structure of the country. This point will be dealt with in the relevant section of this chapter.

## II - MIXED ECONOMY

Earlier in this chapter we have said that the Turkish economy consists of public and private enterprises with both functioning side by side.

The share of public investment in total investment has shown a considerable change compared with 1950. The

---

(1) First Five-Year plan 1963-1967, S.P.O. pp.55-56

(2) OECD, Turkey, May, 1963, Paris, p.18.

percentage of public to total investment was 36 per cent in 1950 and it rose to 55 per cent in 1960.<sup>(1)</sup> The main reason for such a sharp rise was an increase of investment in public and basic services. The share of productive investment, in fact, was negligible.

Investment devoted to the general and annexed budgets and the S.E.E. and private enterprise can be seen in the Table 1. The general budget constituted 66 per cent of total public investment (on the average) while the S.E.E. amounted to 34 per cent during the period 1950-1960. The private sector, on the other hand, lost its share in the total of investments and declined from 64 per cent in 1950 to 45 per cent in 1960.

Table 1 - The Percentage Distribution of Total Investment Between 1959-1961.

	1959	1960	1961
General and Annexed Budgets.	27.9	29.5	37.1
State Economic Enterprises	19.5	20.3	16.9
Local Administrations	3.3	4.9	5.3
Private Sector	49.3	45.3	40.7
	100.0	100.0	100.0

Source: First Five-Year Plan, SPO, p.65.

(1) First Five-Year Plan, p.65.

The investment made by the S.E.E. is rather low compared with other investment groups and compared with some Western European countries. The share of S.E.E. investment in the total rose by 4.1 per cent from 1959 to 1960, while it dropped by 20 per cent in 1961. The average percentage of investment by the S.E.E. stood at 18.9 (19) per cent for the three years prior to the First Plan. In 1957 this ratio was 32 per cent in the U.K, 25 per cent in France, and 27 per cent in Italy.<sup>(1)</sup> If we exclude the State Railways and the P.T.T. from the status of S.E.E, (whose activities are in general considered as public services) the ratio of the productive investment of the public enterprises is still strikingly lower.

The main fields in which S.E.E. are engaged are manufacturing, mining, energy and banking.<sup>(2)</sup> While the private sector predominates in the traditional fields, public enterprise has the leading role in activities which require large amount of capital and modern administration techniques.

In agriculture private enterprise has the largest scope in the form of small holdings, while only 1 per cent of agricultural income is created by the state farms and other public enterprises.

---

(1) First Five-Year Plan, p.65

(2) Ibid, pp. 66,67

In industry the private sector produces 51 per cent of the net output.(value added)<sup>(1)</sup> The cement industry is more or less in the hands of private and mixed enterprises, while the paper industry is mainly attached to the State. Mining contributes 2 per cent of the National Income, and that part of mining which is under the control of the State enterprises accounts for three fourths of total mining production. Private enterprises predominate in the textile industry, while energy and hydro-electric establishments are almost all in the hands of the State.

The largest proportion in the sphere of commercial activity and construction is devoted to private sector, and its share in both sectors amounts to 90 per cent. This figure stems from the fact that in most cases, state projects are undertaken by private enterprise. The trade operation of public sector is left to a few big state enterprises such as the Soil Products Office, Agricultural Supplies, the Petroleum Office and Sumerbank.<sup>(2)</sup>

The area of industry in which private enterprise is most active is textiles. The value added in this field constituted 35 per cent of the income created by private manufacturing industry in 1960. Other fields in which the private sector is active, are food, chemical products, and earthenware industries. In the same year these four sectors

---

(1) First Five-Year Plan, p.66

(2) Ibid, p.66.

provided 72 per cent of the income created by private industrial enterprises.<sup>(1)</sup>

### III - INVESTMENT POLICY.

In order to achieve a 7 per cent rate of growth in the national income, 18 per cent of the Gross National product has to be invested. The annual rate of growth is an average figure and can naturally move above or below 7 per cent. Similarly investment which is 18 per cent of the Gross National product is an average for the First Five-Year plan and will increase to 19.3 per cent in 1967 and to 21 per cent in 1977.<sup>(2)</sup>

During the last decade on average, 13.7 per cent of the GNP was devoted to investment. The planners have decided to increase this rate up to 18 per cent in the First Five-Year plan and tried to provide the necessary resources to finance it through domestic and external means. It is estimated that 15 per cent of the GNP will come from domestic sources with the remaining 3 per cent from foreign sources.<sup>(3)</sup> This latter figure was 2 per cent over the last decade. As a result of this, foreign sources' share in gross investment will increase from 15 per cent in the period 1950-59 to 17 per cent in the plan period.

---

(1) Ibid, p.67

(2) First Five-Year plan, p.33.

(3) The execution of the plan will require external financing to the extent of \$1.8 billion during the 1963-1967 period, OECD, Turkey, May, 1963, paris, p.50.

Considering the recorded trend in investment rate after 1958 (See Table 2), it is possible to see that the target set for it by the planners shows no large deviation from past experience. Actually, after 1958 capital accumulation rose considerably, and investments, which constituted 14 per cent of the GNP in 1958 increased to 15.6 per cent in 1959 and 16 per cent in 1960. Therefore, one can conclude that the planners have been influenced by the recent increases in the rate of investment instead of taking into account the fact that the country's domestic resources could achieve a real increase through a reform in financial policy which is considerably neglected at present.

A comparison with some other underdeveloped countries will indicate that the rate of investment in Turkey is lower than in many of them. (See Table 3)

Table 2 - INVESTMENTS AND ITS DISTRIBUTION BY SOURCES.

(Million T.L.)

Years	GNP	Gross Total Investment	Ratio of Investment to Gross output	Current Balance of payments Deficit	Investment out of Domestic Saving	Distribution of Gross Investment				Distribution of Gross Private Investment.			
						1	2	3=2/1	4	5=2-4	6	7	8
1950	10834.3	1,000.0	9.6	140.0	860.0	187.6	58.0	81.0	673.4	316.3	357.1		
1951	12270.8	1260.4	10.3	263.2	997.2	288.2	90.6	109.6	772.0	345.8	426.2		
1952	14320.5	1835.8	12.8	554.4	1281.4	474.3	131.4	142.4	1087.7	489.5	598.2		
1953	16821.0	2087.7	12.4	460.0	1627.7	527.6	182.2	300.4	1077.5	565.4	512.1		
1954	17114.8	2517.6	14.7	499.8	2017.8	583.7	196.0	277.3	1461.6	798.6	663.0		
1955	20059.5	3006.1	15.0	503.7	2502.4	748.7	209.0	529.9	1518.5	1017.5	501.0		
1956	24334.0	3260.3	13.4	217.8	3042.5	995.5	232.0	609.9	1422.9	1080.6	342.3		
1957	30528.7	4017.0	13.1	224.8	3792.2	1281.1	351.5	666.4	1718.0	1295.5	432.5		
1958	36108.0	5042.8	14.0	349.5	4693.3	1455.7	331.3	1251.0	2004.8	1587.6	417.2		
1959	44703.7	6989.0	15.6	1356.0	5633.0	1953.6	228.0	1361.0	3446.4	1963.8	1482.6		
Total of 10 years	226645.3	31,016.7	13.7	4569.2	26447.5	84960	2010.0	5328.9	15,182.8	9450.6	5732.6		
1960	4392.8	7779.0	16.0	1224.5	6554.5	2292.6	379.7	1357.5	3749.2	1945.0	1804.2		
1961						2784.6	400.0	1262.2					

Source: Yalçın, A, Bes Yıllık Planın Genel Görünüşü, AÜ, SBF. Yayınları, in "Maliye Enstitüsü Konferansları, Bes Yıllık Kalkınma Planı" Sevinç Matbaası, Ankara 1963, p.31.

Table 3 - TARGETS IN THE PLANS OF VARIOUS COUNTRIES.

At the beginning of Plan periods.	Israel	Japan	Greece	Colombia	Chile	Yugoslavia	Turkey
GNP (\$)	700	400	384	261	585	200	195
Average rate of Investment	% 24	% 31	% 23	% 23	% 15	% 39	% 18
Productivity of Investment	% 39	% 24	% 27	% 25	% 35	% 29	% 39
Rate of Growth in GNP (Per Annum)	9.5	7.8	6.0	5.7	5.4	11.3	7.0
Mg. Propensity to save	% 29	% 33	% 25	% 36	% 33	% 35	% 26.5

Source: Yalcin, A. op.cit. and World Economic Survey 1959

A rather low level of investment in the past has been due not only to the paucity of investment opportunities, but also to the lack of an entrepreneurial spirit and to the absence of appropriate institutions for a capital market. A related difficulty in savings has not only been that savings were low, but that this was owing to the traditional preference among the wealthier groups for spending their income in unproductive investments (or luxury consumption) which did not add too much to output. Like most underdeveloped countries, Turkey was lacking in a capital goods industry of any significant size, and therefore, heavily dependent upon imported supplies. The capacity to import capital goods for investment purposes was hindered by the acute foreign exchange difficulties which the country experienced after 1954. The strongest inflation the country faced in the subsequent years aggravated the foreign exchange situation even more. As a result of this, it appeared that investment requiring imported capital goods were substantially reduced. This position led the country to investments in construction and housing which were permitted to expand due to the domestic production of cement.

However, the First Five-Year plan has found a remedy to the foreign exchange difficulties and the issue of directing investments to mostly productive fields. The

first problem will be solved by foreign aid ensured through the consortium, and the latter by the measures necessary to curtail investment in construction and luxury housing (i.e. through tax and credit policies - introduction of investment tax allowances, and abolition of the present 10 year tax holiday for new buildings)<sup>(1)</sup>

The scope of the private sector which received 79.6 per cent of the Gross National product in 1962, will gradually decline toward the end of the plan period. The plan has been based on the assumption that 75.7 per cent of total resources will be in the hands of the private sector in 1967.

(i) What is meant by this is that during the plan period private enterprise and individuals will be entitled to a smaller share of the GNP either through consumption or investment expenditures. This is the result of an effort to increase the rate of capital accumulation and, as is stressed in the plan, it is felt that this can best be achieved by the public sector's direction of the use of national resources.

(ii) The state will impose direct and indirect taxes upon taxpayers and, through its S.E.E, it will force consumers to pay much higher prices than before for the products of the S.E.E and, thus, by this action it will

---

(1) See, OECD, Turkey, May, 1963, pp.22 & 41.

be able to collect the required resources for financing economic development.

The main idea behind all of these is that the public sector is strong enough in allocating these resources for productive investment purposes rather than other expenditures which are not directly linked to economic development. Consequently the State will provide a large volume of investments through domestic savings.<sup>(1)</sup>

However, this policy will obviously invite some serious problems; that of whether the total volume of investments will rise faster than before by this transfer of sources from the private to the public sector. The question which arises here is that of how far the capital accumulation process would be accelerated by limiting the scope of the private sector's investments.

#### IV - INVESTMENT DISTRIBUTION AND SECTORAL ANALYSIS.

It will be appropriate to examine investments from the points of view of those various sectors and agencies which undertake these investments.

The total public and private investments in the First Five-Year plan would amount to 59.65 million Turkish liras in order to achieve an average rate of growth of

---

(1) In other words the State will pursue an "Etatist policy" in the sphere of capital accumulation and economic growth.

7 per cent and a balanced growth of sectors.<sup>(1)</sup>

The distribution of total investments by main sectors is presented in Table 4.

#### 1 - AGRICULTURE.

Prior to the planning era, agriculture developed mainly through extension of the area under cultivation and did not receive enough investments.

Actually, agriculture has been neglected in the past and excess population and disguised unemployment have become very pressing on the development of this sector. Therefore, in the plan due attention has been given to investments leading to intensive farming. Also it is realised by the planners that it will be necessary to raise agricultural production in order to meet the demands of other sectors for raw materials and to expand exports.<sup>(2)</sup>

In order to achieve these targets the planned investment in this sector will rise from 1.213.2 million liras in 1963 to 2.851.0 million in 1967. (See Table 5.) This implies that the share of agricultural investments in the total will rise substantially; from 12.8 per cent to 20.2 per cent over the plan period - 57 per cent increase.

---

(1) First Five-Year Plan, p.121.

(2) Ibid, p.129.

It seems that very little is to be invested in agriculture in relation to output. Yet this small figure is because investments in agricultural training are included in education investments and that irrigation investments are partly included in the energy sector.<sup>(1)</sup> Also the value added to agricultural investments by the farmers own individual undertaking (irrigation systems, barns and ware houses) are not included.

The production targets of the agricultural sectors were determined according to the development expected in the demands of other sectors (i.e. industries processing food and other agricultural products) and, to the rate of population growth and per capita consumption.<sup>(2)</sup>

Because, in a developing country consumption expenditures have a strong propensity to rise (due to the rise in incomes and employment, and steady growth in other sectors), some necessary measures have been envisaged to avoid a shortage of food and other agricultural products. The fear of inflation is well understood by the planners and, to this effect, they have projected the importation of wheat,<sup>(3)</sup> rice and sugar-beet to provide a balance between demand and supply for these goods.

---

(1) First Five-Year plan, p.123.

(2) First Five-Year Plan, pp.123,133

(3) Wheat will be imported from the U.S.A. according to the agreement on agricultural surpluses. In case of insufficient output of wheat Turkey will continue to import wheat even after 1965. Ibid.p.153.

It is estimated that in the First three years of the plan period (1963-1965) 500.000 tons of wheat will be imported to fill the stocks of the Soil Products Office.<sup>(1)</sup>

Turkey will be able to import more of the investment goods and raw materials which are necessary for rapid industrialisation if agriculture can provide a surplus for export.

Although the rate of growth in agricultural production reached 7.4<sup>(2)</sup> per cent in 1963, which was greatly in excess of its planned target (4.2 p.c.), this rate may fluctuate from year to year depending on weather conditions. Therefore a higher productivity in agriculture is indispensable.

---

(1) Ibid, P.152.

(2) OECD, Turkey, August, 1964, paris, pp.6,8

Table 4 - Sector Investments in Relation to Total Annual Investments.

(As percentages)

	1963	1964	1965	1966	1967	Total.
Agriculture	12.8	15.8	18.1	19.7	20.2	17.7
Mining and Quarrying	4.8	6.8	6.6	6.1	3.1	5.4
Manufacturing.	22.8	21.8	18.9	13.1	11.1	16.9
Energy	7.4	7.9	8.8	9.4	9.1	8.6
Transport and Communications.	13.7	12.5	12.3	14.1	15.4	13.7
Services	6.1	3.9	5.3	7.9	9.2	6.6
Housing	21.9	20.6	19.8	19.7	20.0	20.3
Education	6.9	7.2	6.6	6.4	8.2	7.1
Health	2.1	2.1	2.3	2.4	2.3	2.3
Tourism	1.5	1.4	1.3	1.3	1.4	1.4
	100.0	100.0	100.0	100.0	100.0	100.0

Source: SPO. First Five Year Development Plan, 1963-67,  
Ankara, 1963, p.123.

Table 5 - Gross Investments, 1963-1967

(Million T.L.at 1961  
prices)

	1963	1964	1965	1966	1967	Total.
Agriculture	1213.2	1712.2	2182.0	2590.0	2851.0	10.548.
Mining and Quarrying	457.8	735.2	794.6	809.9	435.5	3.233.
Manufacturing.	2166.3	2359.9	2276.9	1726.4	1559.7	10.089.
Energy	706.4	850.0	1057.9	1233.5	1286.2	5.134.
Transport & Communication.	1298.0	1355.9	1482.3	1851.9	2171.3	8.159.4
Services	581.0	426.1	637.0	1030.0	1291.8	2.965.9
Housing	2085.0	2229.0	2390.0	2594.0	2818.0	12.116.0
Education	660.0	783.0	795.0	836.0	1153.0	4.227.0
Health	200.5	230.1	278.2	320.2	317.9	1.346.9
Tourism.	145.5	148.2	164.7	175.6	193.0	827.0
<b>TOTAL</b>	<b>9513.7</b>	<b>10829.6</b>	<b>12058.6</b>	<b>13167.5</b>	<b>14.077.4</b>	<b>59646.8</b>

Source: SPO. First Five Year, Development Plan, 1963-1967,  
Ankara, 1963, p.122.

The possibilities of extending the area under cultivation in Turkey, are rather limited and primary emphasis has to be placed on improving yields as a result of more intensive cultivation and on increasing the area under double cropping through the provision of adequate water and other supplies. More intensive farming is the inescapable solution to Turkish yields which, on the average, are poor by World Standards.<sup>(1)</sup>

Actually, the size of land holdings and land ownership have been main impediments to an increase in agricultural productivity. Land holdings in agriculture, as we stated in chapter 1, are mostly in the nature of very small holdings which are not suited to intensive farming practices. Land holdings over 500 acres constitute 14 per cent of the total cultivated land, while the rest (86 p.c.) are small holdings.<sup>(2)</sup> Also if we take into account the farming enterprises we still notice that 75.2 per cent of the cultivated land is in the form of units under 500 decar and 24.8 per cent over 500 decar.<sup>(2)</sup> The average size of farming units is 77 acres which implies a considerable fragmentation of holdings. Again these small units are scattered at some distance from each other,

---

(1) Productivity per hectare in wheat production, on average is 1000 kg, while it is 2000-3000 kg in the Common market Countries. See, Aktan.R. Müsterek Pazar, SBF. Sayı 24, 1960

(2) See, Cillov.H. Turkiyen Ekonomisi, op.cit.p.164.

(2) Ibid, p.170.

which creates a substantial wastage of resources (capital and labour)<sup>(1)</sup>.

The main reasons for these excessive small land holdings are of an economic, social and legal character. First, a rapidly increasing population in agriculture has caused great pressures on land, and people who cannot find employment possibilities elsewhere are forced to remain in agriculture. Secondly, the Law for Inheritance has resulted in a tremendous distribution of inherited land among heirs.<sup>(2)</sup> It is also added that the agricultural credits policy may have encouraged further fragmentation of land holdings.

Because of the factors we have just mentioned there is no tendency toward large farm units. Actually, the small number (it dropped from 413 to 235 between 1946-1951) of big farms, has tended to become smaller and has resulted in medium-sized farms (between 500-5000 acres)<sup>(3)</sup> As an exception, small farm units which practiced mechanization have shown a tendency to grow into medium size farms. Yet the speed of fragmentation into small farms was more than the rate of expansion into large farms.<sup>(4)</sup>

- 
- (1) Berzeg.K, "Türkiye Gerçeklerinde Toprak Reformu, Forum, 1 Mayıs 1964, Sayı 242 & 15 Mayıs 1964. Sayı 243. This sort of farm constitutes 7 per cent on average.
- (2) Ibid.p.12.
- (3) Either because of the Law for inheritance or because of the fear of nationalisation. See. Berzeg.K.op.cit.
- (4) Ibid, p.13.

The First Five-Year Plan has recognised the importance of land reform in the sense that the size of holdings will be increased within maximum limits and that land consolidation will be imposed, especially where irrigation and soil improvement projects will be implemented. (1)

Although the redistribution of land is also urged, this does not imply the distribution of land in the smaller forms but redistribution of State and privately owned lands which exceed the maximum limits. This limit is not specified, but there are reasons to believe that the limit will be determined as 5000 acres. (2) It is also expected that small and medium farmers will be able to form co-operatives if the necessary encouragement is given (due to production and marketing advantages).

Contracts between landowners, tenants and share-croppers are to be arranged in order to protect the rights of the latter. This point is important from the standpoint of enabling the tenants to improve their agricultural yields. (3)

To achieve a productivity increase, agricultural credits will be used more effectively than before to raise investments (on fertilizers, seeds etc) rather than

---

(1) First Five-Year Plan, op.cit.p.168.

(2) Berzeg.K, op.cit.

(3) 73 per cent of the farming units are run by their own landlords, while 22 per cent are operated by semi-landlords and tenant farmers. People who run others' farms constitute 3.5 per cent of the total. See.Cillov.H.op.cit. p.172.

consumption. It is a known fact that credits granted by the Agricultural Bank in the past did not receive sufficient control and were mostly directed to consumption purposes.

That unfortunate experience has been well recognised in the First Five-Year Plan which recommends the Agricultural Bank to follow a credit policy as: <sup>(1)</sup> (i) the fields which are convenient for higher productivity will receive preference (selective credits), (ii) the use of credits granted will be effectively controlled, (iii) a distinction is to be made between credits of an operational character and those which are for investments; (iv) contrary to past experience medium and long-term credits will be extended.

For all of these objectives the Agricultural Bank, during the plan period, will receive 1 per cent of the budget each year as an addition to its own capital. <sup>(2)</sup>

It is stressed in the First Five-Year plan that full utilization of idle and surplus manpower in the rural areas will be provided. Therefore, special programmes are to be prepared for utilizing the excess labour. Actually it is thought that a Community Development Programme may prevent wastage of manpower and resources, and may also increase the knowledge of the peasants for improving their production techniques and co-operative movements. <sup>(3)</sup>

---

(1) First Five-Year plan.p.166.

(2) Ibid. p. 167.

(3) Ibid. p.93.

It is rather regrettable to see that the issue of land reform, which embraces the consolidation of small holdings and the redistribution of lands which are in excess of maximum limits and which are owned by the private and public sectors, has been delayed for almost three years.

As a conclusion we may say that a solution of the land holdings problem comes before the schemes for the rehabilitation of pasture, the improvement of livestock and, the extension of irrigation.

## 2- INDUSTRY - Manufacturing, Energy and Mining.

Despite the development projected for agriculture, the share of this sector in the GNP will fall gradually as shown in Table 6. This is due to the rapid expansion foreseen in the other sectors particularly in industry.

In 1961, 42 per cent of income came from agriculture, 23 per cent from industry and 35 per cent from services. If we include manufacturing, mining and energy in the industrial sector, we can see that the total investments devoted to industry as a whole in the plan, are 30.9 per cent of total investments. From this, one can assume that the First Five-Year plan is a kind of industrialisation plan. Nevertheless, agriculture has also received a large share of 17.7 per cent of the total investments, which is far above the level attained in the past.

The investments allocated to industry amount to 18.456.2 million T.liras with the inclusion of mining, manufacturing and energy. (See Table 5) The highest share in industrial investments goes to manufacturing with 54 per cent followed by energy with 27 per cent and mining with 12 per cent.

A large part of investment in manufacturing industry is concentrated in the first three years of the plan. This is because investment in the Eregli Iron and Steel Works are scheduled for the first three years of the plan and, secondly, because of the large volume of unfinished projects of the S.E.E. completion of which is expected during the first years of the plan.<sup>(1)</sup> Investments in manufacturing industry constitutes 16.9 per cent of total investments and will reach 10.089.2 million T.liras during the whole plan period.

Table 6 - Percentage Share of Sectors in GNP.

	1962	1963	1967
Agriculture	43.8	43.0	38.3
Mining & Quarry	3.2	3.3	3.6
Manufacturing	12.8	13.5	16.7
Energy.	0.8	0.9	1.1
Transport & Communications.	3.9	4.1	4.6

Source: First Five-Year Plan, op.cit.p.125.

(1) OECD, Turkey, May 1963, p.19.

It is said that important changes will take place in many branches of manufacturing industry. While investment which will allow the previously established industries to develop in line with the growth in the national output can be reasonable, investment which has been projected for some industries, <sup>(1)</sup> given the fact that they have idle capacity, can be questioned. However, in case these investments are directed to the better utilization of idle capacity with the result of lower costs of production, this attempt can be justified. Of course, this may also create favourable export possibilities only if they can be allocated in such a way as to induce lower costs.

Investment allocated to mining is over 3 billion T.Liras amounting to 5.4 per cent of gross investments. During the first four years of the plan period (1963-1966), investments in mining will increase almost by double which looks as a satisfactory figure. Yet we may add that we did not find any explanation of the drop in investments in 1967.

Stress has been laid on investment in energy as well so that economic growth can proceed without interruptions. Investments devoted to this sector amount to 5.134.0 millions during the plan period - an increase of over 80 per cent. It will be right to assume that the development

---

(1) For instance, textiles, sugar, industries, etc.

of power will be channelled to manufacturing uses rather than consumers.

### 3 - HOUSING AND, TRANSPORT AND COMMUNICATIONS.

Despite the fact that the share of housing in gross total investment seems to be highest (20.3 p.c.), it appears to be heavily reduced in the plan period compared with its 30.9 per cent share in the period 1950-1959.<sup>(1)</sup>

Private gross investment in 1962 stood at 3.5<sup>(2)</sup> billion T.liras and, more than half of this (around 2 billion T.L.) was in housing and a large proportion of it in "luxury" housing. Therefore, it is decided in the plan to restrict luxury building in general and to direct private savings towards more directly productive investments. It is the purpose of the plan that investments shall be diverted from luxury to low cost housing, and as a result, a greater number of dwelling units will be built in the country.

The measures taken to channel private funds into the desired types of investment (esp.manufacturing rather than house-building) are:<sup>(3)</sup> (i) more favourable credit

---

(1) See, Yalçın, A. Bes Yıllık Planın Genel Görünüşü, in AÜ SBF Yayınları, No.163-159. Sevinç Matbaası, Ank, 1963

(2) OECD, Turkey May 1963, p.22

(3) OECD, Turkey May 1963, p.41

facilities and tax reduction are to be provided to the entrepreneurs who invest into the required fields;<sup>(1)</sup> (ii) the present 10 year tax holiday for new buildings, which makes investment in this field particularly attractive, will be reduced and only be maintained for new hotels and cheap dwellings. Also the development of a broader capital market is envisaged.

Obviously in order to direct private savings to productive sectors such as manufacturing and agriculture, the country requires a rather brisk and active capital market together with highly developed banking and financial institutions. But the creation of a capital market is a long-term process and may require the formation of large joint-stock corporations as an effective mechanism for attracting small money holdings. This attempt will also require radical reforms in the existing laws and administration.

A rather large volume of investment has been projected for transport and communications which, in the plan period, will amount to 8.159.4 million T.liras - 13.7 per cent of total investment. This projection may not be justified,

---

(1) Both accelerated depreciation allowances and a scheme to exempt certain proportions of re-invested funds from income and corporation taxes have been approved under the 1963 income tax bill. Ibid.40

given the heavy and excessive investment made in the 1950's. (1)

#### 4- EDUCATION AND HEALTH.

Out of a total of 59.6 billion T.liras 4.227 billions will be directed into education. The main principle here is to raise the general level of education and increase the amount of skilled labour required for economic development. The plan has devoted almost 10 per cent of total investment to both health and education. (See Table 4)

The planners have decided to reduce the growth of current expenditure which is not directly linked to development. Therefore it is expected that the high rate of current expenditures will fall from 6.3 per cent in 1963 (2) to 4 per cent in the next years of the plan period.

Contrary to these expenditures health and education (including agricultural extension services) have been assumed to be linked to development and, therefore, both are projected to grow by 15 per cent per annum in the 1962-1967 period. (3)

- (1) The investment in transport formed, on average, 24.2 per cent of the total investment in the period 1948-1955. This is the second largest proportion after the investment in housing (28.3 p.c.) Source. Dr.Kenan Gurtan, "Turkiyede Yatirimlar," Istanbul, 1959.p.148.Table XIX.
- (2) The high per-centage in 1963 is due to a promised increase in the salaries of the public sector.
- (3) OECD, Turkey, May, 1963, paris.p.16.

Investment in the public health sector constitutes 2.2 per cent of the total which is much over the level attained in the past. An efficient use of health services has been included in the health programme. However the shortage of personnel may obstruct the large application of this programme.

#### 5 - TOURISM.

Investment in tourism, will amount to 827 million T.liras. As can be seen from Table 4, the share of tourism investment in total investment will show a fall from 1.5 per cent to 1.4 per cent over the five years. The amount of investments devoted to tourism will increase from 145.5 million in 1963 to 193.0 million T.liras in 1967 - an increase of 33 per cent.

One would have some doubt about the low projection of investments in this sector, given a very high potential for improvement which can give rise to large tourism receipts. The success of this sector has been tested in a neighbouring country Greece, as well as in some other Mediterranean countries which obtain a large amount of foreign reserves through the growth in this very sector. In order to increase foreign exchange reserves Turkey, should tend to devote much more investment than has been projected in the plan. One feels that this sector has not

received due importance in allocation of investments.

#### V - THE RATIONAL DISTRIBUTION OF INVESTMENTS.

One of the arguments relating to the distribution of investments in a developing economy is that if, in the initial stages, it devotes its resources primarily to the building up of an "infrastructure" of roads, railroads, power etc., the external economies created by these will bring about an acceleration of its rate of development.

However, it is questionable whether either practice or experience is such as to give the argument the strength of wide-spread applicability. Some references to certain developing countries will be useful in this respect.

In India, over-investment and over-capacity in many "infrastructure" sectors have considerably slowed down the country's rate of growth. In 1960, the use of water from major and medium irrigation projects was only at 65 per cent of capacity. In the energy and power projects too, there was a small degree of over-capacity. (1)

One may ask how these investments slowed down the rate of growth of India. It is obvious that precious funds were spent on projects which do little to increase the stream of output. Less output will mean fewer resources to finance a sustained investment effort and the economy

---

(1) See, Bellikoth, R, Shenoy, The Right Road to Indian Progress, Fortune,, April 1960, p.246.

becomes forced to stop. The volume of investments can be increased proportionally to national income if investments can be allocated to productive sectors rather than to the infrastructure.

Because of this experience, the Indian economy has been called "progressing but stagnant" which is distinct from a developing economy.<sup>(1)</sup>

In the First Five-Year plan, an increase of little more than \$3 billions in gross investment yielded an annual increase of \$1 billion gross output. Over \$5 billions of investment yielded an annual increase of \$1 billion, again in the first two years of the Second Five-Year plan.<sup>(2)</sup>

It was only after the second Five-Year plan and so in the Third Plan (1962-1966) that India has decided to squeeze social services, transport and communications and housing. The planning Authorities have cut down their investment design toward sectors that promise relatively direct, quick and predictable pay offs in additional output.<sup>(3)</sup>

---

(1) See, Higgins, B, Economic Development, The Case Study of India, W.W. Norton & Co., New York, 1959.

(2) Shenoy, op.cit.

(3) See, John.P.Lewis. India, in "planning Economic Development" Hagen, E.E, Richard D.Irwin Inc. Homewood, Illinois, 1963, p.86.

In Italy, the government spent a total of \$ 2500 millions in Southern Italy for infrastructure Works like transport, power, tourist facilities, etc, in the period 1950-1958.<sup>(1)</sup> To promote industries, some measures were also taken such as tax reliefs, incentives and preferential credit facilities.

But the results of this approach to economic development were far from being satisfactory. Between 1956 and 1957 the number of unemployed had increased from 690.000 to 976.000 despite the fact that part of the annual population surplus migrated to the more developed areas of Italy such as North or Overseas countries.

The share of Southern Italy's income in the total national income between 1950-1957 was as follows:

THE INCOME OF SOUTHERN ITALY AS A PERCENTAGE OF ITALIAN  
NATIONAL INCOME.

1951	1952	1953	1954	1955	1956	1957
20.2	20	20.7	21	20.6	20.8	20.8

Despite the tremendous push received, the share of Southern Italy in the country's welfare remained unchanged. Also industrial income showed a very small increase during the same period; it was 17.3 per cent in 1950 and rose to

(1) See, Casa per il Mezzogiorno, Bilancio, 1951-1958, p.144.

18.5 per cent in 1957. However, annual investments in Southern Italy remained throughout this period at the initial level of 15 per cent of the total investments.

INDUSTRIAL INCOME IN SOUTHERN ITALY AS % OF TOTAL INDUSTRIAL INCOME.

---

1950	1951	1952	1953	1954	1955	1956	1957
17.3	17	17.3	17.1	17.9	18.2	18.5	18.5

---

In the case of all communist countries the main policy has been to neglect, on purpose, all sectors other than heavy industry. For instance, in Russia the policy followed by the economic planners was to stress on the development of heavy industry rather than the construction of "infrastructure" and "social overhead capital" (1)

As can be seen from the table presented below, (7) transport and communications in only one case (Russia) reach 15 per cent of investments, but in most cases are not over 10 per cent. As commodity sectors, industry and agriculture constitute two-thirds or three-fourths of the total investments, with more emphasis on industry.

Again from Table 8, we notice that, with the exception of Czechoslovakia, none of the communist countries invest an extreme part of their resources in fixed capital

---

(1) Hollzman, Franklin, D, The Soviet-Kuznets Combine: A Study in Investment Criteria and Industrialisation Policies, O.J.E. Aug. 1957.

formation. Besides, if their capital-output ratio seems to be lower than in non-communist countries, the main reason should lie entirely with the distribution of investment resources.

Now, we may turn to Turkey and see whether she can follow an investment policy to establish heavy industry, and whether the resources in the country will permit such an approach.

Table 7 - Distribution of Gross Fixed Investment, by Sector.  
(Percentage)

Sectors	Bulgaria 1949-1957	China (Mainland) 1950-1959	Czechos- lovakia. 1949-1957	East Germany 1950-57.	Hungary 1949-1957	U.S.S.R. 1951-1958.
Industry & Construction.	44.0	49.1	44.7	48.5	42.8	41.2
Heavy Industry and Construction.	38.7	....	....	39.6	38.2	37.3
Light Industry	5.2	....	....	8.9	4.6	4.5
Agriculture	21.1	16.1	11.5	10.0	17.0	17.7
Transport and Communications	10.0	12.6	11.7	11.7	10.7	8.1
Trade and Procurement	7.6	5.1	2.4	....	2.6	....
Housing	7.3	17.1	17.0	14.5	10.9	20.0
Other	10.0	-	12.5	15.3	16.2	12.3

Source: World Economic Survey, 1959. p.119.

Table 8 - Relationship between Rate of Growth of National Income and Gross Fixed Investment, 1949-1958.

Country and Period	Average Annual Percentage Increase.			Incremental Capital-output Ratio.
	National Income	Investment	Gross Fixed Investment. As % National Income	
<u>Bulgaria</u>				
1949-1958	10.3	8.2	19.8	1.9
1949-1953	14.9	12.0	19.9	1.3
1953-1958	6.9	5.3	19.7	2.9
<u>China (Mainland)</u>				
1950 to 1958	12.3	31.6	19.1	1.5
1950 to 1953	12.2	49.9	12.5	1.0
1953 to 1958	12.4	21.7	22.5	1.8
<u>Czechoslovakia</u>				
1949 to 1958	8.0	11.3	28.2	3.5
1949 to 1953	9.0	14.7	27.1	3.0
1953 to 1958	7.2	8.8	29.0	4.0
<u>Eastern Germany</u>				
1950 to 1958	8.0	18.6	15.6	1.9
1950 to 1953	10.0	20.0	11.3	1.1
1953 to 1958	6.9	17.8	18.2	2.6
<u>Hungary</u>				
1949 to 1958	7.5	9.0	22.7	3.1
1949 to 1953	11.9	27.9	25.8	2.2
1953 to 1958	4.1	4.1	20.2	4.9
<u>U.S.S.R.</u>				
1949 to 1958	11.5	14.1	21.3	1.9
1949 to 1953	12.5	12.5	19.9	1.6
1953 to 1958	10.7	15.4	22.1	2.1

Source: World Economic Survey, 1959.

Heavy industry will obviously require the main factors like an abundance of raw materials and large markets for its products. Turkey, in contrast to Greece and other neighbour countries, is endowed with large mineral resources; and the size of its population can justify the establishment of medium and heavy industries. But one must not forget the fact that there are quite definite limitations in respect to markets, given present standard of living, per capita income and unbalanced growth in other sectors. Domestic demand must be sufficient to meet their products and keep pace with their growth.

Turkey, in the first Five-Year industrialisation programme of 1935 tried to establish both medium and some heavy industries at the same time. These establishments were forced to operate under full capacity due to inconsistent development in other sectors together with domestic demand. Because balanced growth was ignored, the consequences of that attempt did not provide a rapid development of the over-all economy.

With countries like China, Russia and India whose size and populations are of "continental" dimensions, even if their present market is limited, it can be argued that their eventual needs will necessitate all types of heavy industries. However, one cannot say that this is the

quickest way to economic development and this seems to be another problem.

The planners in Turkey should be very careful in projecting these heavy industries that they create cost advantages for the users of their output. Otherwise, importation of such investment goods would appear to be a much wiser and more rational policy.

Actually, exponents of the "heavy-industry-first" argument rely a great deal on Russian policy and the Chinese imitation. But, one could ask quite rightly, how much of this policy is due to the need for self-sufficiency forced upon these two large countries by the Western trade embargo adopted in the early stages of their development, and how much was it due to basically strategic as distinct from economic reasons? Further, it is well recognised fact that in the developed countries the growth of heavy and light industries marched hand in hand and that a light industry such as textiles, was often the vanguard of industrial development.

According to some evidence, there is a positive correlation between the value of output required for a minimum efficient plant and the volume of investment expenditure required for that purpose. The larger the output, the larger the investment to be allocated. This process

can also fit to the movement from consumer commodities to intermediate and primary ones.<sup>(1)</sup> Generally speaking, it can be said that the closer we are to the final consumer in the manufacturing industry the smaller the capital intensity. The more we move up to the intermediate and primary commodities, the higher the capital intensity, the lower the turnover rate and the larger the minimum efficient plant.<sup>(2)</sup>

A proper conclusion from the above information will be that a country with a shortage of capital, which starts with limited markets, should concentrate more on the production of consumer goods and follow this policy as a principle. But the consumer goods industry may eventually give impetus to the establishment of other industries which require a high capital intensity.

All this discussion does not imply that "infrastructure" works are not necessary, and should not, in some circumstances, precede other industries. Yet their importance may be easily overstressed. For example social overhead capital investment (transport and communications, power, irrigation and etc) should not be permitted to be the basis of development policy, if they cannot attract

---

(1) See, Leontief, W.W, Studies in the Structure of the American Economy, part III, Chp.6, Oxford Univ.press.1953

(2) See, Creamer, D, Capital-Output trends in Manufacturing Industries, 1880-1948, Nat. Bureau of Econ. Research, Occasional paper 41, 1954.

Directly Productive Activities (i.e. industry, manufacturing, agriculture..) to come in.<sup>(1)</sup> One also may add the fact that to put ones faith in the country's development on SOC is rather a risky decision and may well provide no satisfactory solution to the problem.

While we cannot object to the significance of external economies created by such a policy, particularly in the development of largely backward regions, there is sound evidence that many advanced countries of today (i.e. Japan, Soviet Russia) have developed by resorting first to industrial and agricultural activity which then gave way to social overhead capital investments.<sup>(2)</sup>

#### VI - THE PUBLIC AND PRIVATE SECTORS.

The share of public investment in the GNP is projected to grow at an annual rate of 10.6 per cent in the plan period. In other words they will rise to 11.4 per cent in 1967 compared to 10.3 per cent in 1963. On the other hand, private investment will increase by 11 per cent per annum and rise from 6.7 per cent to 7.9 per cent of the GNP in the same period.<sup>(3)</sup>

---

(1) There may be a wastage of resources if such infrastructure activities are not fully utilized. For example, in Turkey the utilized capacity of highways is 63 per cent and railways 20 per cent. Same thing can be said for energy and power. See, chp.1.

(2) On this point, see, Hirschman, A.O, The Strategy of Economic Development, pp.94/95.

(3) See, Chp.3 and 4.

Total investments is expected to rise from 17.0 per cent of GNP in 1963 to 19.4 per cent in 1967. This implies that total investments will rise gradually over the plan period.

Private enterprise has played a considerable part in investment efforts of the country. A brief examination of the past experience will be appropriate. Table 9, illustrates the position of private sector's investments in the total investments and GNP during the period 1950-1962. One thing is clear from the table, that private investments and their relative share in the total have fluctuated from year to year due to the fluctuations in the whole economy.

During the first half of the last decade (1950-1955), when economic life was rather stable and far from the effects of inflation, private investments constituted between 51 and 67 per cent of the total investments. The average percentage for these six years was 57.9 per cent. But while the strongest inflationary conditions prevailed in the country (1956-1958), this rate dropped to 40 per cent. After 1958, owing to the stabilization programme, private investments showed some increase and to this effect; it rose again to 49.3 per cent in 1959 and to 52.3 per cent in 1960.

In the unplanned economy period (1950-1961), with the exception of severe inflationary years, the investment capacity of the private sector has never fallen below

7 per cent, and contrary to this even it rose to 8 per cent in 1959 and 1960.

However, in the First Five-Year plan the share of the private investments in the GNP has always been kept below 8 per cent. It would have been more realistic to project an investment potential for the private enterprise equal to the 1959-1960 level which was almost 8 per cent of the GNP even without any essential measures to encourage it.<sup>(1)</sup> It seems that the level of private investments in 1961 has been accepted as a base for their projection.

In the plan period private investments will record a higher increase than public investments. (55 per cent and 44 per cent respectively)<sup>(2)</sup> Yet in order to attain the development objectives set for the plan period, housing investments which averaged 57 per cent of the total in the last three years prior to the plan will have to be kept within certain limits. The planners have stated that the ratio of private housing investment to total private investments will fall from an average of 52 per cent in the plan years to 47 per cent at the end of this period.<sup>(3)</sup>

---

(1) It is suggested by some authors that the volume of private investments has been under-valued. See Yalcin, A, Bes Yillik Planin Genel Gorunusu. op.cit. p.15.

(2) See, Table 16, in Chp.4.

(3) First Five-Year Plan, op.cit. p.109.

Table 9 - GNP and the Rate of Private Investments.

Years	Total Investment.	Private Investment As % of GNP	Private Investment	Private Investment as % of Total Investments.
1950	1.000	6.5	673	(67.3
1951	1.260	6.3	772	57.9 { 61.3
1952	1.836	7.6	1.088	{ 59.2
1953	2.088	6.4	1.078	{ 51.1
1954	2.518	8.5	1.462	{ 58.1
1955	3.006	7.6	1.519	{ 50.5
1956	3.260	5.9	1.423	{ 43.6
1957	4.017	5.6	1.718	40.2 { 42.8
1958	5.043	5.7	2.005	{ 40.0
1959	6.989	7.7	3.446	49.3
1960	7.613	8.1	3.981	52.3
1961	7.024	5.5	2.714	38.6
1962	8.436	6.6	3.450	40.9

Source: Yalcin, A., Bes Yillik Planin Genel Görünüsü, SBF Dergisi. op.cit. quoted from table 3.

This can be achieved only if the monetary and financial policy can stimulate private entrepreneurs to invest in more productive fields. A higher increase in productive investments will mean diverting a higher proportion of private savings to industrial fields. Measures to be taken in regard to housing credits will, it is hoped, make luxury dwellings less profitable than before. The other measures have been pointed out earlier in the chapter.

It seems that the Turkish Authorities did not want to set specific targets for private investment, because the general policy of the plan is to encourage maximum development of private initiative.

But one feels that the pattern and volume of private investments in each sector must be set beforehand in order to ensure a consistency between various targets and variables. No doubt, a correction of private investments would necessitate a corresponding correction in the over-all plan, otherwise this would result in an imbalance in the distribution of annual resources. If the actual rate of increase in private investments exceeds the targets set in the plan and if the public sector insists in realizing its current expenditure and investments, the total demand will exceed the supply of resources and this would

clearly bring about an inflationary pressure over the whole economy.

Therefore it will be imperative for the government to revise its expenditure targets each year and readjust them according to the investments undertaken by the private sector. As an alternative, the government must evaluate the whole range of investment possibilities, give priorities of production and be ready to make the production decisions itself, if private enterprise fails in realising its targets which might endanger the whole situation.

What is usually done in economic development plans is that, first, a large number of activities to be undertaken by public authorities are specified to the exclusion of the private sector and that the balance is preferably left to private entrepreneurs. While the latter must point out the projects and investment decisions they are going to take, the former also must disclose the incentives, encouragement and assistance which the government is willing to give the private sector in order to carry out their projects.

The pattern of investment planning is well-known. Plans consist of a number of investments, usually of an "infrastructure" or "Social overhead" nature, and list possibly a number of heavy industries. The rest of the

programme is lumped together and left to the private sector with the vaguest encouragements. Contrary to this, public projects enjoy the advantage of experienced foreign consultants and advisers employed by the state, and have priority in the use of all factors and resources, as well as finance. The private sector is given targets to achieve, but usually fails to realise these targets for one reason or another.

In the Turkish Five-Year Plan, at least, there is evidence that in each well-studied project the government is determined to implement, and willing to offer, the necessary safeguards and incentives to which private enterprise will respond.

The plan will encourage the private sector by specifying the long-term targets of economic growth and the expected developments in various activities; by introducing the general economic policy (fiscal and credit) to be implemented by the government and, most importantly, by undertaking large scale developmental investments.<sup>(1)</sup>

Where non-inflationary<sup>(2)</sup> development will be the policy the private sector very specifically will receive these incentives from the government: 1) government

---

(1) First Five-Year plan, p.443.

(2) Inflationary pressures will be avoided by fiscal and credit measures as well as if necessary, by reducing governmental expenditures. OECD. Turkey, 1963

agencies will provide the Union (Chambers of Commerce and Industry) with systematic and continuous information on the development of each sector (and over-all growth) and the new measures to be taken, 2) investment in productive fields will receive the necessary inducement by the cutting of investment in luxury housing (through tax measures and taxes on speculative profits stem from real estate), 3) long term investment credits and medium-term credits (which were difficult to obtain in the past and were met by short-term commercial credits) will be extended by establishing Investment Banks,<sup>(1)</sup> 4) also newly established industries will receive selective tariff protection which will eventually be lifted. Importation of raw materials will be facilitated and, to promote exports, the production tax and other taxes on export goods will be refunded, 5) finally, to help the private sector to realise its targets, foreign investment will be attracted by ensuring foreign investors the right to engage in the same fields of activities as Turkish corporations, and by providing strong guarantees in transfer and payments.<sup>(2)</sup>

As we have noted elsewhere, the public sector has been given a dominant role in undertaking investment decisions and projects. One may ask why the planners see

---

(1) Also the credit sources of the people's Bank & the People's Fund, which provides credits to small enterprises, will be increased. Five-Year Plan.p.446.

(2) Ibid, p.447.

more investment opportunities than private entrepreneurs.

Firstly, a proper knowledge of markets and technology may be mentioned here. Market surveys, in general, are expensive procedures and may present considerable difficulties while their absence may prevent the establishment of otherwise profitable enterprises. The scarcity and expense of technical personnel constitutes a real handicap in grasping a knowledge of current technology. It can, therefore, be said that the difference between the individual and the planners' reaction is one of time. This is the time between each of them becoming aware of new opportunities. Secondly, there is a difference between social and private costs and benefits. The payoff period is usually longer and the risks greater when a large fixed investment is undertaken. The entrepreneur would then super impose a risk premium on his turnover and profit estimates that might make the project uneconomic. When foreign currency is under-valued the economics of producing domestically a commodity whose import was hitherto unrestricted may not be the same for the planner and the entrepreneur. Another point which may be added to this is that the profitability of a project to an entrepreneur depends on his profit and the turnover to capital invested while the planner evaluates investment opportunity by the "value added" from all factors of

production including labour as well. In the former case, wages are considered as a cost to be deducted from profits, while to the latter it constitutes "value added". Finally, the magnitude of the market and the co-ordination of projects may be different to entrepreneurs and to planners. The entrepreneurs, as a rule, consider the marginal productivity of a single investment according to the current demand or visible demand for it.<sup>(1)</sup>

Actually, the fulfillment of more than one investment using each other's output and the resulting expenditure, may lead into the investment projects which otherwise would still be uneconomic. In planning for co-ordinated investments, one or more of the projects must be economic, given the existence of others. If all of these investment projects are uneconomic, co-ordination itself will not make them economic. As soon as one of the investment decisions is made the other becomes economic more rapidly. We see again that the divergence between the individual and the planners' decision is one of timing.<sup>(2)</sup>

Measures to be taken by the Government must stand on a careful and large evaluation of each case. There must not be too much intervention and protection by the State

---

(1) See, Aubrey.G.Henry, Investment Decisions in Under-developed Countries, in "Capital Formation and Economic Growth," Nat. Bureau of Econ.Research, 1955, pp.397-440

(2) Chenery,H.B, the Interdependence of Investment Desisions, in "Abramovitz M."Allocation of Econom, Resources" Stanford, 1959.

because this might lead to self-complacency and stagnation. On the other hand, one must not forget the fact that the private sector cannot be expected to overcome its inertia without necessary and special incentives and assistance from the government.

#### VII - THE SPLIT OF INVESTMENT BETWEEN PUBLIC AND PRIVATE SECTORS.

Public investments will be divided among Central and Local Authorities and, the S.E.E. From Table 10, one can see that 37.9 billions liras of total public investments will be shared by the Central and Local Authorities and, the S.E.E. as 28.1 billion liras and 9.8 billion respectively.

In the plan period one-fifth of the investment in agriculture will be made by the private sector, while the remainder will be undertaken by the State in the form of infrastructures. A large part of investment in manufacturing and mining will be undertaken by the S.E.E while 1/3 of the manufacturing investments will be from the private sector. About 80<sup>(1)</sup> per cent of total investments in the energy sector will be made by the consolidated budget and the S.E.E. Investments in the housing sector will mostly be realized by the private sector which amounts to 12.180 million T.liras.

A point which must be questioned here is that of

---

(1) OECD, Turkey, May 1963, p.39.

whether infrastructure investments by the State and investments by the S.E.E the former constituting half and the latter one-fifth of total public investment, will achieve the capital-output ratio of 2.6 which is projected by the planners? In other words can this structure of investment which has a rather long "gestation" period, produce the expected and necessary commodities which are projected for the whole plan period?

The S.E.E which depended a great deal upon outside sources in the past and were unable to realize their investment projects without resorting to such funds, will hardly show a satisfactory performance during the plan period. As can be seen from Table 11, the S.E.E. in 1962, were not in a position to finance even a small part of their gross investment expenditure and the latest estimates were that this will continue to be the case in 1963 and 1964. The "net profits" of the S.E.E despite a doubling from 1962 to 1967 will bear no relation to the capital worth of these firms which is probably of the order of 50 billion T.liras. <sup>(1)</sup> More can be said against the projections of decreasing "debt servicing" which is expected to drop from 493 million T.liras in 1963 to 360 million in 1967.

---

(1) OECD.op.cit. p.21.

Table 10 - The Structure of Total Investments According to Sectors and Agencies. (In the First Five-Year Plan)

Million T.L.

Sectors	Total	Infrastructures	S.E.E.	Private
Agriculture	10.548	7.897	666	1.985
Mining	3.232	-	1.350	1.882
Manufacturing	10.089	-	6.901	3.188
Energy	5.134	5.134	-	-
Transport	8.007	5.498	827	1.483
Services	4.041	4.041	-	-
Housing	12.180	-	-	12.180
Education	4.218	4.218	-	-
Health	1.359	1.359	-	-
Tourism	827	-	-	827
<b>TOTAL</b>	<b>59.635</b>	<b>28.147</b>	<b>9.744</b>	<b>21.736</b>

Source: Yalcin, A, Bes Yillik planin Genel Görünüşü, SBF. Dergisi, 1963, p.43.

The investments of the S.E.E during the plan period will be financed through the budget, Insurance and Pension Funds, the special "Amortization and Credit Fund", and foreign assistance. (direct investment from abroad or by the more indirect way of counterpart funds). For instance, it was projected in 1963 that these enterprises would obtain 275 million T.liras from the budget, 600 million from counterpart funds and 1.000 million from Insurance and Pension Funds.

(including the special Amortization and Credit Fund). These funds were to be directed toward the operational deficit (150 million) and to investments (1.730 million).<sup>(1)</sup>

According to this projection, investments of the S.E.E were accorded a 23 per cent increase in 1963 compared with the level in 1962.<sup>(2)</sup> In 1964 this was forecast to rise by almost 60 per cent to 2.654 million T.liras.

The main reasons for the inefficiency and low productivity in the S.E.E can be summarized as follows:

i) the pricing policies followed by the government have, in most cases, imposed on enterprises the burden of subsidizing consumption goods, ii) there has been a misuse of resources through misdirected, unfinished or, in some cases, excessive investments, iii) Also there is no proper cost-accounting because fixed assets are not adequately valued, and a considerable part of investment has been financed by short-term banking credits which constitutes a heavy burden on them, iv) their organization has defects in relation to the command within and between them, and, also to the government.<sup>(3)</sup>

---

(1) OECD, op.cit.p.45.

(2) The level of S.E.E. investments in 1962 was 1.400 million.  
Ibid. p.44.

(3) Ibid. p.21.

Further, relations between parliament and these enterprises are not well-organised and the High Control Board, which is a parliamentary body and has considerable power over these enterprises; has been unsuccessful in promoting their productivity.

Therefore in 1961 a group of foreign experts was invited to examine their operations, and submit a report about their studies. The conclusions of these experts were taken into account in the drafting of the law on S.E.E. which was submitted to parliament in 1963, and approved in March 1964.<sup>(1)</sup> A "State Investment Bank" that will replace the present "Amortization and Credit Fund" was also prepared in 1963 in line with the Five-Year plan. This was approved by Parliament at the same year. This bank has responsibility for coordinating the investment finance of the S.E.E.

Given their 40 per cent share in total industrial production and their coverage of most of the country's big industrial and mining units, it is apparent that the economic development of the country can be achieved if these enterprises can function more efficiently and economically. Their idle capacity must be removed and their competitiveness against private enterprises should be encouraged so that they can improve their productivity. Also, the government authorities

---

(1) Ibid. p.21. Also see, OECD, Turkey August, 1964, p.18.

should rule out the excessive privileges given to them in the financing of their investment projects. This seems to be a disincentive for improving their efficiency.

Table 11 - PROFIT AND INVESTMENT ACCOUNT OF THE S.E.E.

Million T.L.

	1962	1963	1965	1967
<u>1 - NET PROFITS.</u>	91	159	279	348
2- Depreciation Allowances	476	609	721	808
3-Total own funds(=Gross Profits)	567	766	1.000	1.156
4-Taxes	224	218	261	299
5-Debt Servicing (Net)	544	493	429	360
6-Dividends	-	30	34	41
7- Total 4 through 6	768	741	724	700
8-Own Resources (=3-7)	-201	-25	+276	+456
9- Continuation and Completion of Investments already started.	1363	1.531	647	600

Source: OECD, Turkey, May 1963, paris, p.20.

CHAPTER VI.

INVESTMENT CRITERIA.

This chapter will contain discussion on the planning methodology, the balanced growth and the investment criteria adopted in the formulation of the First Five-Year Plan. Also the most suitable investment formula for future developmental programming will be elaborated.

#### 1 - THE PLANNING METHODOLOGY IN THE FIRST FIVE-YEAR PLAN.

The main weakness in the Turkish economic programming in the past has been the lack of devices by which over-all objectives could be brought to bear in the evaluation of specific projects and measures. The procedure adopted in the last decade was that first objectives such as improvement in employment, balance of payments and productivity were set, and then technically feasible projects were selected as they came along. In Turkey, as in many underdeveloped countries, the "Sectoral" approach which was based upon the collection of projects from various sectors failed to provide a rational allocation of resources as well as consistency among sector programmes. Resource allocation in the past was dependent upon subjective and unquantitative value judgements which was rather a disappointing practice.

#### A - INPUT-OUTPUT ANALYSIS.

Therefore, the recognition of this fact has led the planners to conduct their projections in two stages. First,

input-output analysis was performed according to a fifteen-by-fifteen input-output table where the data of 1952 were used. The data collected were evaluated according to 1959 buyers' prices.<sup>(1)</sup> The production projections were made in relation to the increase in final demand which stems from the 7 per cent rate of growth in the national income.

The total demand was divided into 7 groups. These groups consisted of private consumption, public consumption, exports, competitive imports, private investments, public investments, and changes in stocks. Private consumption was estimated on the basis of the income elasticity of consumer demand in the last 10 years.<sup>(2)</sup> Public consumption, on the other hand, was taken as the demand on sectors arising from general and annexed budget expenditures. Further studies were carried out on external markets and on the production possibilities of exportable goods. Final demand estimates were accompanied by the demand estimates of intermediate goods. Inter-industry demand, therefore was based on the estimated growth of each sectors in order to prevent bottlenecks of basic goods during the plan period.

---

(1) Planning in Turkey, Summary of the First Five-Year Plan, Ankara, 1963, p.13.

(2) First Five-Year Development plan, op.cit. p.118 Income elasticity of demand was compared to income elasticities in countries with similar per capita levels.

## B - SECTOR PROGRAMMES.

Secondly a balance between sectors was ensured by a set of modifications and adjustments based on the statistical information obtained from a large number of reports. (almost 50 reports on private business). The demand projections for each sector included sub-sectors and in its formulation the regional demand was taken into account as well. (1)

In determining production targets of the sectors, final inter-industry and foreign demand were taken into consideration. The existing capacity of sectors was examined and the surplus capacity was sorted out. How and to what extent this idel capacity can be utilized was also estimated. The additional capacity was then calculated in order to meet the demand which the actual and utilized part of capacity are not able to meet. The optimum capacity of production reached in this manner was broken down by plan years to meet the demand of each year and to achieve consistency between demand and production. After reaching the capacity requirements according to the total demand of the economy, investment needed for this purpose was adjusted correspondingly. (2)

---

(1) This was done particularly in electrical power, transport and communications.

(2) Planning, SPO, September 1963, Ankara, P.30. It should also be noted that productive capacity was distributed among regions in order to utilize it.

For the realisation of production targets of each sector, raw materials and capital goods to be imported from abroad were also calculated. On the other hand exports to be generated by each sector were estimated according to the foreign market conditions. Because an improvement in the balance of payments was set up as one of the main objectives of the Development Plan, the planners have given priority to the requirements of import substituting industries.

In this approach a comparison of the marginal projects within sectors and among sectors has been the main principle in project evaluations. In the first stage items which cannot be produced technically and physically are dropped from the programme. Also products for which demand is not large enough to justify a minimum efficient unit of production are excluded. The remaining scope will represent a set of "investment possibilities" which are suitable technically and market wise. Year by year the increased demand generated by previous investment will bring about "new investment possibilities". Therefore the change in demand for a product is estimated so that the time-path of investments can be established over the whole plan period.

When we take into account the foreign transactions, most commodities and services will have a considerable

effect on the balance of payments. It is generally accepted that the balance of payments is the most important source of investment possibilities in the absence of detailed knowledge of demand patterns. This is conducted in the following manner: if the rate of growth in national income is known, import demands can be projected correspondingly. Similarly, export expansion possibilities can be based on income and price elasticities of the exportable goods plus domestic cost structure. Following this, domestic substitution and export expansion are then evaluated.

The balance of payments is used as a device to control the consistency of investment allocations because any neglect of the interdependence of investment decisions will show an immediate effect on the balance of payments.

This procedure which is adopted by the Turkish planners is superior to the "sectoral" approach in many respects. First it gives a very clear picture of the economy's needs to producer services. Investment in these sectors is highly capital consuming and, its role in increasing the output of commodities is decisive. Yet over-investment in these services may easily lead to inflationary pressures without ensuring further growth, unless a proper study of markets and resources which this investment will serve has been carried out. (1)

---

(1) See, Higgins.B, Economic Development, principles, problems and policies,"The Case Study in India". W.W.Norton & Co. New York. 1959.

This method will also avoid the establishment of independent programmes like "highways" or "power programmes and leads to the creation of those infrastructure projects which are mostly connected with increased commodity production.

As a result one may say that if product demands and possibilities of production can be evaluated by uniform criteria and the results found detected against the supply of factors of production, a degree of consistency and an efficient allocation can be achieved. If not perfect this at least minimizes imperfections as far as circumstances allow.<sup>(1)</sup>

## II - THE BALANCED GROWTH AND RESOURCE ALLOCATION.

In the "Objectives and the strategy of the plan "it has been stated that "in the long-run development in Turkey will materialise as a result of investing in the most productive fields. In a country like Turkey where nearly half of the national income is generated in agriculture and where three-fourths of the population live in villages, it is appropriate to think in terms of marginal adjustments rather than in terms of all or nothing when considering the choice between agricultueal and industrial investments".<sup>(2)</sup>

---

(1) Chenery H.B. Development policies and programmes, Economic Bulletin for Latin America, Vol.III, No.1.March, 1958.

(2) See, Introducing Turkey's State Planning organisation, Ankara, 1963, p.17.

One can conclude from the statement above that the first Five-Year plan has chosen the "Balanced growth" doctrine for its economic development path. But it has not defined properly what is meant by the concept of balanced growth, though it is mentioned very frequently.

The main consideration behind the choice of Balanced Growth has been the resolution to maintain a balance and avoid bottlenecks among sectors, and, further, to lay the foundations of sustained development. <sup>(1)</sup>

For this purpose it is said that natural resources, capital and manpower would be allocated in the most economic way to increase factors of production. Also as we have noted earlier, inter-sectoral relations are maintained to prevent imbalances and bottlenecks. In order to ensure sustained development production of goods and services will be on a scale to meet long-term demand. Accordingly investments will be channelled toward the output of those goods and services for which demand is likely to increase with rising incomes.

A balanced growth of industry and agriculture has been stated to be the main principle in sustained growth. Therefore, the expansion of industry is closely related to the development in agriculture since in the latter per capita income increases will be needed to create new markets for

---

(1) First Five-Year Development plan, op.cit. p.117.

non-agricultural products. Similarly industrial growth is urged to absorb the surplus of labour living at subsistence level and exerting great pressure on the peasant economy.

An appropriate distribution of productive investment between industry and agriculture, is, however, not sufficient in itself to provide a steady growth in total output. Both industrial and agricultural development may be hindered by the shortage and inadequacy of basic facilities, such as transport and power.<sup>(1)</sup> Therefore, in the first plan, due attention was also given to such services where both receive a 23.3 per cent share in total investment.<sup>(2)</sup>

It is generally assumed that an adequate supply of basic facilities is a prerequisite for future expansion of commodity production, yet excessive investment in such basic services may cause inflationary pressures in the economy.

There are sound reasons to believe that the balanced growth approach to economic development of Turkey is justifiable.

---

(1) For instance in Argentina, owing to negligible investment or even disinvestment in these sectors during the 1940's and early 1950's acute shortages of these services have been experienced in recent years and production in other sectors was adversely affected. See UN, World Economic Survey, 1959. Investment Trends and Policies in the Underdeveloped Countries, p.78.

(2) First Five-Year plan. p.123.

i) Turkey's unbalanced growth experience which goes far back to 1935 and was initiated with the First Five-Year Industrialisation Programme did not ensure a sustained growth in the economy despite the fact that it was exercised for almost 20 years. (See Chapter 2) Many of the industries were forced to operate below full capacity owing to the lack of markets and unbalanced growth in other sectors.

Industrialisation cannot be accelerated without creating new markets for non-agricultural products and this can only be achieved by increasing income of the agricultural population which constitutes two-thirds of the total population. Also it must be remembered that the rate at which any industry grows is conditioned by the rate at which other industries grow. One may believe that diversified home market industries growing together and supplying each other with expanding markets are essential elements of the dynamics of technological progress. (1)

ii) Actually Turkey, as we said in Chapter 5, has concentrated excessively on social overhead investments

---

(1) "The doctrine of balanced growth solves the agricultural marketing which is limited by the absence of employment opportunities in industry which forces agriculture to feed too many people on the farms. Also industry cannot expand by itself because it needs expanded markets in agriculture. Therefore the way to rule out this marketing deadlock is to compose a range of new plants in such a way that full advantage is taken of complementarities and external economies on the supply side, and of the complementarities of markets on the demand side" See. Singer H.W., Balanced Growth in Economic Development, the Malayan Econ.Review, Octob.1958.pp.5-6.

and basic services during the period 1945-1960 which created a sound base for the application of "Balanced Growth". Also large scale investment in agriculture has been projected to make the new system self-contained and meet the demand of other sectors accordingly.

iii) According to the planners' projection the marginal rates of savings (27 p.c.) and taxation have been sufficiently high to secure the expost identity of savings and investment without inflation. Turkey has taken necessary measures to increase its domestic financial resources by adopting a new agricultural income tax, higher rate of progressive taxation (on income and corporation tax), and by visualising the S.E.E to generate their own funds without any burden on the general budget. Turkey has also been enabled to overcome her acute shortage of capital and foreign exchange needed for the implementation of the First Five-Year plan through the consortium established for aid to Turkey. Therefore one of the main conditions of balanced growth (financial requirements) was then at least provided.

One tends to believe that a failure in ensuring a balanced growth among various sectors and particularly between industry and agriculture has been one of the main reasons why Turkey has not acquired sustained economic growth.

We feel that the "Balanced Growth" approach of the planners is a plausible choice.

### III - INVESTMENT CRITERIA.

It is generally agreed that shortage of capital, though by no means the only obstacle, is one of the main obstacles to rapid economic development in underdeveloped countries. Great importance therefore, attaches to the question of how these countries can make the best use of the capital they can command.

The principle, in traditional economic analysis, has been namely that capital (like other resources) should be so allocated between and within different sectors of the economy that the return from, or net productivity of the last or marginal unit employed in each of the different uses shall be as nearly as possible equal.<sup>(1)</sup> Accordingly this principle favours spreading capital rather widely and thinly throughout the economy and using labour-intensive rather than capital-intensive methods of production.

Some others, however, have taken the view that if underdeveloped countries spread their capital widely and use labour-intensive techniques, new investments will not make a sufficient impact in any one sector of the economy to bring

---

(1) International Labour Review, International Labour Office, "Some aspects of Investment Policy in Underdeveloped Countries", Jan-June, 1958.

about any radical transformation in the economic structure or to achieve a "take-off" into self-sustained growth.<sup>(1)</sup>

According to the capital-intensive investment school, it will be wiser to concentrate a large proportion of newly available capital on the establishment of industrial nuclei even at the cost of leaving the rest of the economy starved of capital in the hope that these industrial nuclei (or development blocks) will constitute strategic growing points from which the impulse towards growth will spread to the rest of the economy.

Yet an appeal to history lends very doubtful support to this approach. There have been many cases in which the establishment of capital-intensive nuclei has not brought about a process of growth in the rest of the economy. i.e. oil installations in the Middle East Countries.

In the First Five-Year plan, as can be seen from the statement above (in objectives and the strategy of the plan) resources will be channelled according to the "marginal adjustment" criterion. It is not explained what is meant by this definition, yet it appears that the marginal productivity of investments has been pointed out.

The projects have been divided into two broad categories. The first group included the projects of an

---

(1) International Labour Review, op.cit. And also, see, Galenson, W. & Leibenstein H. "Investment Criteria, Productivity and Economic Development, QJE, Feb.1955, No.1, Vol. LXIX.

economic nature and for them the criterion of marginal productivity has been applied. In the second group projects of a social nature were examined and regional development possibilities and comparative needs were considered the most suitable criteria. (1)

In giving priorities to projects the following criteria have been taken into account: (2)

- (1) the value added by the project to the national income,
- (2) the effect of each project on the balance of payments,
- (3) the employment effect of each project,
- (4) the economic profitability of the projects within their specified periods,
- (5) comparative cost.

But it has not been possible to find the marginal productivity formula adopted by the planners in selecting investment projects. The real problem here is to find a careful balance between these objectives and avoid anything that could upset this balance.

Once we have a method of estimating product demands and investment possibilities we must find a formal criterion which could be used to evaluate projects and determine priorities. An investment criterion should reflect the

---

(1) First Five-Year plan, op.cit.1963-1967,p.121

(2) First Five-Year plan.p.121.

relative availability of scarce resources in evaluating each project and also should result in an investment combinations which optimize results in the plan period as well as in each investment year.

There are a set of investment criteria<sup>(1)</sup> can be used in resource allocation, but the most important ones have been the social marginal productivity of investment and the cost: benefit ratio.

According to A.F.Kahn, and H.B.Chenery the correct criterion for obtaining the maximum return from limited resources is marginal productivity or, from the point of view of the society as a whole, social marginal productivity SMP, taking into account the total net contribution of the marginal unit to national product, and not that portion of the contribution which may accrue to the private sector.<sup>(2)</sup>

The social marginal productivity criterion has been mostly used in underdeveloped countries while the cost: benefit ratio has been used more often in advanced countries.

---

(1) According to Murray.D.Bryce, there are a large number of investment criteria can be applied in project selection such as, factor intensity, the plant size and complexity criterion, the foreign exchange benefits, the commercial profitability, and national economic profitability criteria. M.D.Bryce, Industrial Development, A Guide for Accelerating Economic Growth, McGraw-Hill Book Comp. Inc.New York,1960,p.23.

(2) See, Kahn,A.F. Investment Criteria in Development.QJE,1951.

Given the objectives of the First Five-Year Development plan which are to maximise national income, to increase employment and to obtain the highest foreign currency earnings per unit of investment, it may be suggested that the social marginal productivity is the best criterion to be applied in resource allocation.

The social product of a given investment unit in terms of the plan objectives consists not only of the total value added but of the employment added and the net effect on the balance of payments. This statement can be represented in the following formula: (1)

$$U = U(Y, B, W, \dots) \quad (1) \text{ Where,}$$

Y = effect on national income

B = net effect on the balance of payments,

W = effect on the wage flow,

U = index of social welfare,

Here, employment includes the manpower used in the operation of a certain project and is represented by the annual wage flow. Wages, during the construction period of the project is assumed to be a part of the investment. Income includes the increased market value of output after deduction of the costs of raw materials and services which come from abroad as well as the deduction of the rate of interest on

---

(1) See, Chenery, H.B, The Application of Investment Criteria, QJE, 1953, Volume LXVIII.

capital. (Costs of servicing capital). The product of the investment represents a constant net addition to the annual flow of output and differences in physical durability do not effect the comparability of projects because they are reflected in the provision for amortization, interest and obsolescence.

The increment in U corresponding to a given increment in investment may be written;

$$DU = \frac{dU}{dY} DY + \frac{dU}{dB} DB + \frac{dU}{dW} DW \quad (2)$$

If we measure U in national income units and divide by  $\frac{dU}{dY} = 1$ , we obtain;

$$DU = DY + \frac{dY}{dB} DB + \frac{dY}{dW} DW \quad (3)$$

As can be seen from the formula the marginal change in social welfare (DU) is equal to the social marginal product of a given investment.

$\frac{dY}{dB}$  and  $\frac{dY}{dW}$  then becomes the marginal rates of substitution between income and foreign currency and income and wages. These two ratios indicate the number of units of output which the planner is willing to sacrifice in order to obtain a unit increase in foreign currency earnings and in wages (employment).

Some corrections will be necessary if there is a gap in the balance of payments and a problem of unemployment where some have the burden of supporting the unemployed workers. Because the balance of payments deficit is large and the marginal propensity to import is 1.16<sup>(1)</sup>, we may note that the value of every marginal unit of foreign exchange earned is worth 16% more than the current foreign exchange rate would determine.

When we turn to the employment situation in the country we can say that one worker in ten is unemployed and therefore every 9 workers will share the burden of supporting a tenth one at a minimum standard of living.

If we call the first ratio  $r_1$  and the second one  $r_2$ , again we can write:

$$\frac{dY}{dB} = r_1$$

$$\frac{dY}{dW} = r_2$$

The formula 3 then takes the form:

$$SMP = \frac{Y}{K} + \frac{Br_1}{K} + \frac{Wr_2}{K} \quad (4)$$

In this last formula all variables represent annual flows with the exception of  $K$  which is in terms of stock increments to capital.

---

(1) This figure is found for 1959

Under the assumptions of a minimum of efficient plant and technologically suitable investment, these rates serve as a ranking device in the selection of investment projects. A change in scarcity or surplus of foreign currency and labour will result in a change in these ratios and the priorities of projects will be affected, yet inclusion or exclusion of the projects will be out of the question in the formulation of investment programme.

Should uneconomic projects which are technically suitable but lack a large market to permit of competitiveness, <sup>(1)</sup> be rejected given that there is extensive unemployment in the economy? Or in other words, is there any limiting factor in the selection of such projects? To answer this question we have to look at the gap in the balance of payments. The balance of payments deficit, in the long-run will be determined by a) the rate of growth in the national income and the marginal propensity to imports, and, b) the rate of growth of the foreign countries and their elasticity of demand for our country's exports goods.

This gap shows the extent to which the country would have to sacrifice her real consumption or the extent to which the terms of trade would have to deteriorate in order to bring about an equilibrium in the balance of payments through a currency devaluation. <sup>(2)</sup>

---

(1) We are relaxing our assumption of minimum efficient plant.

(2) See, Johnson.H.G. Economic Expansion and International Trade, Manchester School, May.1955.

If the ratio of the cost of domestic product as against the costs of imports is equal or less than 1, investment projects in domestic product will be taken up. However, we must add that the domestic substitution of imports which looks uneconomic now might become economic and profitable if the real value of foreign currency were adopted. Therefore an adjustment in the foreign exchange rate will affect our choice regarding import replacing projects. Moreover, the nature of the investment programme will have some effect on the balance of payments deficit. It is generally agreed that large investment in social overheads will tend to enlarge the gap while investment in the "commodity" sector will reduce this gap. The former's adverse effect on the balance of payments is due to its high import good consuming character and its small addition to real output. A large deficit, according to the formula we set out above, will give priority to "commodity" investment projects because it will increase the protection rate and also the real output of the economy.

The social marginal product formula may present some problems when we move away from commodity production into producer services. Improvements and replacements in the road network can bring about some reductions in the cost per ton mile or cost per passenger mile through increased speeds and reduced distances. Then the effect of these

factors on the balance of payments can be calculated according to the "import coefficient" per ton or per passenger mile. This analysis will be very necessary, taking into account the rather high import coefficient of transportation in the underdeveloped countries. However if a project is concerned with the establishment of new roads, its contribution to the economy must include the increased production and marketing of the area which has been created by that very project.

Investment projects which are connected with producer services cannot be evaluated in isolation without taking into account their influence on the production and distribution of commodity output.

In the field of power and energy selection between a thermal power station which can run only with the importation of the necessary fuel (we assume there is an inelastic supply of fuel or a shortage of petroleum), and a hydro-electric power station consideration should be given to the effect of these projects on the balance of payments particularly if the country is experiencing a large deficit in the balance of payments. The latter may require large expenditure on the importation of capital goods and equipment at the beginning but later it can be justified because it will operate on local resources. But against this

it may be said that if foreign expenditure on fuel presents no problem, in terms of output per unit of investment the former project would be more suited to hydro-electric power.

There are also some other fields such as education, health and housing where benefit cannot be estimated on a quantitative basis. Therefore, the formula presented above may not be applied usefully. The investments in these fields are conditioned by the direction of consumer demand which they generate and the resource endowment and the rate of growth in the economy.

In case the country's productive capacity is not sufficient to meet the consumer demand generated by these investments either the monetary or the foreign trade balance or both will be distorted. Therefore, the inflationary effect of such investments must always be borne in mind. In the rapidly developing economies where consumption propensities are growing faster than production and where a foreign balance is quite sensitive, heavy investment expenditure must be limited to a point where it will neither impede nor endanger the over all development of the economy.

In order to create a balance between commodity and social services, investments in the latter must be tied to the rate of development in the "deflationary" sectors of primary and secondary production or to improvement in the

balance of payments. Since social services are connected with the productivity and efficiency of manpower, allocation of resources to these sectors as a whole must also be linked to the rate of growth in productive employment.

Very briefly something can also be said on selection of long-term or short-term projects. To determine the most productive project future yields of capital assets must be discounted to their present values, and these discounted values compared with their present costs. Therefore the length of investment projects will play great effect on the choice between projects. If a project is not profitable for a certain period losses occurring up to the break-even point can be capitalized and the net results obtained when it reaches the optimum point can be discounted to the present. If the net results compared with losses are positive and if this is favourable compared with an alternative project which results in net addition to the annual flow of output in a short time, the former one will be chosen.

The significance of this choice is in relation to the resource allocation in the investment programme. The larger additions to the net constant flow of output in the short run the more resources will be available for reinvestment in projects which increase output in the long-run.

However, some writers seem to fear that a marginal productivity approach will lead to neglect of the infrastructure

of transport and power needed for economic development and the effects of the external economies which can give rapid growth to other industries. As we noted elsewhere, the same formula cannot be applied usefully where the benefits cannot be estimated on a quantitative base, i.e. health, housing and education.

Also it may be said that it does not measure the effect of one project on the other projects operating under conditions of inconstant returns.

Despite the fact that a series of objections can be raised against this formula it is generally accepted to be a workable instrument in underdeveloped countries,<sup>(1)</sup> where the market price mechanism is incapable of securing rational allocation of resources.

Because of imperfect markets and uncertainties in the underdeveloped countries it is rather difficult to calculate capital turnover as well as SMP. Yet it is agreed that the social marginal productivity criterion is superior to the former in the following respects: first it avoids the heavy reliance on the indirect and social benefits of a given project which may be used to justify the capital-heavy investment, and secondly the capital-turnover criterion

---

(1) The SMP criterion is very appropriate under the conditions that, i) the inflationary financing of any additional home market sales has been avoided and, ii) there is a sufficient concentration on "commodity" output.

because of heavier utilisation of capital may lead to unrecoverable expenditure<sup>(1)</sup> of resources which cannot hold for the SMP.

The capital-turnover criterion can be used on a more selective basis. It is particularly useful in choosing among projects within a given sector.<sup>(2)</sup> i.e. in agriculture a choice among roads, irrigation or flood protection.

However, where a bottleneck involves capital-intensive investments it is generally agreed that capital-turnover criterion may be applied.<sup>(3)</sup> It may be entirely compatible with the marginal productivity rule to develop certain capital-intensive sectors if the country cannot overcome the "obstacle" without resorting to heavy capital investments. Again it may possess natural resources that can only be exploited by capital-intensive methods. (oil in the Middle East Countries and iron and coal in Turkey)

Therefore, it would be wrong to conclude that the marginal productivity approach is incompatible with the development of strategic growth points (or development blocks)

The balance of payments is one of the most widely used investment criteria. Especially in countries where there is

(1) For instance investment in railroad electrification provides a small savings in imports at the expense of a very low turnover rate.

(2) Chenery.H.B. The Application of Investment Criteria,Q.J.E. 1953.

(3) See, International Labour Review. op.cit.

a chronic balance of payments deficit, investments' effect on the country's foreign trade and payments must receive due attention. Any investment project will have an investment effect with both direct and indirect operating effects on the balance of payments. The effects during the investment period of a project are always negative, while operating effects could be either positive or negative. (1)

Therefore the amount of investment in "commodity" sectors (type I) must be sufficient to offset the negative balance of payments effects of investments of type III and of the investment phase of all sorts of projects. (2)

The balance of payments effect can be used effectively in the preliminary ranking of projects within groups and in determining the size of the investment programme. Any increase in total demand resulting from investment can be satisfied partly from domestic production (under the assumption that there is under-utilized plant and labour), and partly from increased imports. It is clear that the size

---

(1) Purchases of machinery and equipment abroad and multiplier effects of investment on income or imports are negative (investment period). An example for direct operating effects is output of a commodity which increases exports or a substitute for imports or imports for production of the given commodity. See. Chenery. H.B. op.cit.

(2) Type I investment includes exports and substitutes for imports (commodity output), while Type II replacement for goods presently consumed, and Type III home-market goods sold in excess of the increase in real incomes (inflationary consumption goods) See, Polak, J.J. Balance of Payments Problems of Countries Reconstructing with the Help of Foreign Loans, in "Reading in International Trade"

of the investment programme will be dependent on the balance of payments effect.

Though it is a useful criterion in checking the whole programme, it is not a very operational method when applied to individual projects. Also, by itself, it cannot be regarded as conclusive and may lead to serious waste of resources.

It may be concluded that any term in the SMP formula by itself may be misleading and can result in irrational allocation of resources.

---

CONCLUSION.

-I-

The present Turkish Five-Year Plan is probably the first comprehensive planning attempt to deal with the various economic problems of the Turkish economy.

Actually the rate of income growth in the last decade has been at unsatisfactory levels and it showed great fluctuation from one year to another. While the effect of weather conditions on agriculture was a major reason for such oscillation one should not neglect the fact that resources available for investments have been misallocated on inefficient criteria which did not increase the productive capacity of the economy. The inflation faced during 1954-58 was a consequence of the social overhead bias resource allocation which stemmed from deficit financing and remained the basic policy at the time. It was believed that over investments in social overhead capital (transport and communications, electric power stations, dams, hospitals etc.) would result in self-sustained economic growth. But this policy has proved to be a failure.

Indeed, towards the end of the last decade (1958-60), the rate of growth dropped to even 2 and 2.5 per cent per annum which was far below the rate of population growth. There was a pressing need to increase the rate of growth of the economy and to raise the standard of living of the people. The rise

in per capita income cannot be accepted as the sole measure denoting a rise in the standard of living. For clearly, the distribution of incremental income arising from economic development determines to a large extent the degree of rise in the general living standard. Also, as a corollary of this population explosion and low growth in non-agricultural industries, a tremendous unemployment problem arose and the number of people unemployed rose to 1.5 million in 1962 plus the huge disguised unemployment in agriculture (1 million). We have no data on the disguised unemployed in other sectors, but there are reasons to believe that it exists there as well.

Productivity has always remained low in the economy because it has consistently not received due attention in economic development efforts. The lowest productivity has been experienced in agriculture when compared with industry, transportation and services. Of course this, as we stated elsewhere, was due to overwhelming pressure from excess population in agriculture and the small amount of intensive farming practices (land improvements, conservation, fertilizers, seed improvement etc.) to raise the productivity per labour or per acre. Also the small holdings nature of the farming system was a further drawback for productivity increase.

The most important problem which confronted the Turkish economy was the balance of payments deficit which put Turkey under a great burden of debt to the rest of the world. Turkey's foreign debt obligations rose to almost \$1 billion dollars of which \$666 million fell into the First Five-Year plan period.

Trade deficit has also been another setback for economic growth as Turkey's export structure remained more or less static over 15 years. Almost 77 per cent of the total exports derive from agricultural products which are subject to fluctuations in foreign demand. For a long time it was felt that the structure of exports should be changed by including the exportation of manufactured goods as well.

-II-

All these problems we have just cited above found their systematic treatment in the formulation of the First Five-Year plan 1963-1967. However, we may ask: how far may this plan be likely to succeed in solving these problems?

a) Much emphasis in literature has been assigned to overall rates of income growth as a measure of economic development. Yet the significance of rates of growth as compared with other indicators of development can easily be exaggerated.

The 7 per cent rate of growth may seem to be a high one but this rate may contribute only a little towards Turkey's long-term problems if the rate of population growth has not been reduced considerably. In the case where population growth is not very high, a lower rate of growth may mean more than a higher one. Anyway, a high rate may be partially or completely absorbed by the rapid rise in population so that does not result in a better standard of living.

The figures available for 1963 and 1964 (partly) indicate that the rate of income growth at constant prices reached 7.5 and 4 per cent respectively.<sup>(1)</sup> While the first year of the plan period has been encouraging and has even exceeded its formal rate set in the plan, the performance in 1964 was rather disappointing due to delays in the foreign aid promised from Consortium and to bad weather as well as to quite slack markets resulting from the Cyprus problem which caused uncertainty in private and public investment activities. The GNP rose to 55,990,9 million liras in 1963 which is fairly near to its projection in the plan (56.4 million liras). This result was largely due to the rise in agricultural output (net product of agriculture increased in real terms by 7.4 per cent compared to the plan target of an average growth of 4.2 per cent.)

---

(1) See, Turkey.OECD, Aug,1964, Paris,p.7. and also, Planning in Turkey, No.2, S.P.O. Ankara 1964, p.4.

But the real increase in industrial production was 8 per cent while the plan forecast for it was 14 per cent.

Although during the plan period per capita income<sup>(1)</sup> will rise gradually this would not provide a just distribution of income unless the measures necessary for new taxation are introduced and a higher rate of progressive taxation is adopted effectively (i.e. a rise in the rate of income tax and highertax rates in Agricultural income tax)

Even a rising "per capita" income may have little meaning if its distribution is such that the majority of the people experience no improvement in their standard of living. We think that development would mean not only that per capita incomes rise but that no group of people within an economy is worse off, and preferably that all groups are better off than before.

The year to year changes will be fluctuating from as high as over 7 per cent to as low as 4 per cent mostly owing to great changes in the agricultural output. To increase agricultural investments (in 1963, 1964 and subsequent years) has been very reasonable while the low level of projection of intensive investments might be questioned since these sort of investments could lead to higher productivity. The First Five-Year plan has brought little progress in

---

(1) In 1963 per capita income rose to 1718 liras (= \$190.8)

productivity for where industry will show a 26 per cent increase over the 5 year period, agriculture will only show a 15 per cent increase. Yet the productivity in industry will still remain 3.3 times greater than in agriculture (See Chp.4) Obviously this is due to the high level of unemployment in agriculture.

b) The highest absorption of unemployed labourers would be in services (41 per cent) followed by industry (32 per cent) and agriculture (5.6 per cent). Unemployment stood at 1,330,000 at the beginning of the plan period and the expected creation of jobs for 340,000 per annum still would not solve the problem. (According to our findings in chp.4., the unemployment figure would still remain at 0.9 million).

Employment in services and industry would not ensure any solution to the problem of absorbing the labour surplus which exists in agriculture. Besides, one may be right in thinking that to swell employment in services and middlemen's activities would not raise the standard of living because this does not result in sufficient production of goods. Therefore the available manpower should be allocated to sectors where the production of commodities could be increased.

It seems apparent that the economic planners have preferred solving the unemployment problem at the expense

of productivity and output.

Even considering the 15 year perspective, only a substantial alleviation, but no complete solution, of this problem can be foreseen. This stems from the fact that a considerable increase in the labour force is certain to take place over the next 15 year period, whatever the population policy will be in the long run.

A great number of jobs may be created if more labour-intensive industries are encouraged. But still one should not expect much from this given the fact that it is rather difficult to eliminate high cost of production.

c) The Turkish First Five-Year Plan will have little effect on the chronic balance of payments problem from which Turkey has been suffering for a long time. The payments deficit on current external account is expected to remain almost constant until 1967 and gradually decline thereafter. But this expectation seems to be optimistic because the development of the country will necessitate a large and rapid increase of the share of manufactured goods (capital/producer goods) in the total imports. Therefore an exceptional rate of growth in exports would be needed to compensate for these expenditures and to reduce the current account deficit.

While the restriction of imports is a justifiable policy at the moment, there is a large need to encourage the establishment of import-substitution industries. But the projection of the products of these industries in the plan period seem to be unrealistic given the fact that initially they will depend largely upon producer goods from abroad. Also it must be borne in mind that the protection of the home market in this manner may not encourage exports.

There is a tremendous need to increase both commercial exports and invisible earnings. As far as exports are concerned, new export industries will be needed i.e. petroleum, sugar, textiles, fishery products..... New markets for these industries must be explored and their development must be intensified by the necessary subsidy from the General Budget.

As we pointed out elsewhere there is a large potential for increasing tourism earnings (invisible earnings). The plan has emphasized the importance of this sector by devoting large investments but if the past experience in this field is noted, one may doubt whether the planned earnings from tourism could be achieved. (from \$13 million to \$48 million over the plan period.)

The workers' emigration to Western Europe which has recently become large scale may also provide significant foreign exchange earnings if necessary incentives are given to them.

We may conclude that the balance of payments problem will be persistent whatever optimistic assumptions are laid down about exports because of the burden of repayment and interest on the foreign debt. The First Five-Year plan's requirement of external aid will amount to \$1.6 billion and the greater part of it will be borrowed. After long experience in this sphere Turkey should aim at borrowing on suitable terms with very long repayment periods and low interest rates.

-III-

Almost 71 per cent of the population would still be dependent on agriculture while 28.9 per cent on industry and services. In output too<sup>(1)</sup> primary production will account for almost a third at the end of the plan period. Also primary commodities seem to dominate exports being 77 per cent of the total. With the exception of some items (sugar, textiles, petroleum...) very little substantial change has been brought to the structure of exports. (Actually the share of industrial exports in the total rose from 18.0 to 19.9 per cent between 1962 and 1963.<sup>(2)</sup>)

The explanation of all this may largely be found in the structure of investments. Over 50 per cent of the total

---

(1) Only agricultural output.

(2) Planning in Turkey op.cit. No.2, Ankara 1964, p.15.

investments in the plan period goes to social overhead capital<sup>(1)</sup> whose secondary effects would be rather limited in respect of productive capacity. On the other hand investment in primary products (agriculture and mining) would comprise 23.1 per cent of the total, while secondary products a fourth of the total (25.5 per cent). Agriculture and manufacturing will absorb only a third (34.6 per cent) of which the larger proportion would go into traditional activities. Therefore one feels there has been little coordination in the investment effort, resulting in severe imbalance. Although transport developed much faster than either industry or agriculture in the past, it is still to receive a very high percentage which is difficult to understand.

It is obvious that if developed economies grow at an annual rate of between 3-4 per cent, a developing economy has to move at a considerably faster pace if it is even to draw alongside. Therefore one may suggest that Turkey should aim at a higher rate of growth if she wants to increase output, employment and per capita income.

Exogenous factors aside, there are two ways by which the rate of growth might be increased:

---

(1) This includes transport and communications, services, housing, education, tourism and health.

- a) Re-allocation of investments to achieve a more favourable capital-output ratio and
- b) expansion of investments.

In the long run the availability of low capital-output investments largely depends on a corresponding expansion of transport, power and communications, all of which have a very high capital-output ratio. As Turkey heavily concentrated on these infrastructures in the last decade and created a sufficient base for further expansion in primary and secondary industries, one might rightly conclude that resources devoted to SOC should be channelled to the former industries which are the ones to increase productive capacity.

It remains to be seen whether investments can be substantially increased. In practice, given the limitations in "commodity investment" opportunities, a large part of the investments have to be directed toward "social overhead" investments. Yet if expenditures on these expensive projects grew faster than the economies capacity to satisfy the consumer demand generated by such expenditures there will be either a balance of payments collapse or inflation or both. As a result one should expect the planners to have allocated the investments, mostly to primary plus secondary products (they are  $25.5 + 23.1$  per cent =  $48.6$  per cent) rather than social overhead capital.

Summing up:

1. If Turkey can maintain a rate of investment of 18 per cent of the national income and distributes investment so as to attain an overall marginal investment/output ratio of 2.6:1 an annual rate of income growth of 7 per cent is a reasonable objective. However there is large scope for increasing the investment resources above its present proportion in relation to GNP and this we think, might be achieved by a substantial increase of public savings.

(a) This implies that a limitation on the growth of current public expenditure is necessary.

(b) It also requires a rapid increase in tax revenue. In Turkey, further increase in tax revenue could be achieved from those groups which have incomes far above average and which at present escape normal taxation.<sup>(1)</sup> Also greater yields might be obtained from agricultural income by adopting higher rates. (Agricultural incomes were not subject to tax before 1963)

(c) The financial position of S.E.E. might be improved to secure additional finance for economic development (self supporting)

II - Provided productivity requirements are not sacrificed some priority will have to be given to projects

---

(1) OECD - August 1964, Turkey, p.38.

with comparatively higher labour per unit of output.

III - Given the severe deficit in balance of payments, the best starting point for selection of projects is the balance of payments effect.

IV - A high priority must also be attached to investment in agriculture and efficient use of land resources should be achieved for agriculture plays a great part in a balanced development.

V - The development effort could take place under conditions of reasonable consumer sovereignty and individual time preference.

The point here is that these objectives and limitations are not easy to reconcile and their application will require continuous and painstaking efforts. The real problem for the policy makers and planners lies exactly in this need to find a careful balance between them and avoid anything that could upset this balance. It seems that the social marginal productivity formula we stated in chp.6 is the adequate answer to such balance among objectives.

Also the policy maker should be prepared to revise his objectives in the course of implementation of policy either because;

1) actual factor supply is different from his estimates and his criteria, should be revised or,

2) because product demands may change and his allocations become inconsistent with his overall objectives and therefore a revaluation of investment decisions is necessary.

Finally, one may conclude that the First Five-Year plan has been a remarkable step towards solving economic and social problems in a planned manner. Therefore there is a need for continuity of plans. These plans must also grow through necessary research and constant readjustments. The number of people who prepare and formulate them must grow alongside.

If Turkey wants to develop and solve her problems she must pursue a planned development method after having large experience in unplanned economy in the last decade which ended in economic chaos.

The plans must have sufficient theoretical basis and framework for it is not the targets which are of primary importance but the analyses behind them which prevent the policy-makers from repeating former mistakes.

---

APPENDIX A.CAPITAL - INTENSITY CRITERION:

As an alternative to social marginal productivity, capital-intensive investment has been suggested as a criterion to be used in resource allocation.

The capital-intensity criterion has received its best interpretation by Galenson and Leibenstein<sup>(1)</sup> who claim that the aim of economic development is to attain a level of economic capacity which maximizes output per capita at a determined future time. Therefore, the correct criterion for allocating investment resources is to choose for each unit of investment that alternative that will give each worker greater productive power than any other alternative.

In order to achieve this, according to them the amount of capital per worker and the quality of labour<sup>(2)</sup> must be maximised. The criterion to be applied is that which leads to the maximum capital-labour ratio. This is so because it is the capital-labour ratio that determines output per capita. The volume of capital per worker in the long run, will be determined by 1) the amount of investment year by year stemming from the product of the initial investment, and 2) the increase in the size of the labour force.

---

(1) Galenson W & Leibenstein H. Investment Criteria, productivity and Economic Development. QJE 1955 No.p.

(2) Its skill, knowledge, energy and adaptability.

Galenson and Leibenstein do not reject the marginal productivity approach entirely, but they suggest that the policy-makers or planners should try to equate not the marginal productivity of capital in all investment uses, but the "marginal per capita re-investment quotient" which represents the net productivity per worker minus consumption per worker. Then the larger the discrepancy, the more investment resources will be available for re-investment. This argument advocates the advantages of capital-intensive policy on some grounds such as its re-investment and employment effect, its population and modernization effects.

1 - It is argued that investment in capital-intensive projects will create a more rapid rate of investment because it will not be necessary to distribute so much income to labour as under a more labour-intensive approach. What emerges from this is that profit margin will be greater in the capital-intensive establishments than in the labour-intensive ones. The G-L re-investments quotient can be stated as in the following formula: <sup>(1)</sup>

(1)  $r = \frac{X - WN}{I}$ , where X is the output from investment I, W the prevailing wage rate, and N employment to go with I. Actually, it can be said that G-L investment criterion will dictate a choice of technique which maximises the re-investment quotient. The numerator of the re-investment

(1) Koji Taira, A note on the Analytical properties of Galenson-Leibenstein Investment Criteria. Bull. Oxford Univ. Institute of Economics and Statistics. Volume 27, May. 1965, p. 151.

quotient is an annual profit stems from investment projects. One interpretation of the G-L criterion is that the capital-intensive technique results in higher profits than the labour-intensive technique. It is this high profit margin that increases the reinvestment quotient for future investment.

It is also suggested that, if labour-intensive methods are adopted, more workers will immediately be brought into employment from the pool of surplus labour and as a result their consumption and not their saving will go up when they are paid out in additional wages; given the condition that they are living at subsistence level. Therefore, they believe that the capital-intensive method will generate more re-investment fund out of income obtained, and more jobs will be provided within a few years. (1)

Their analysis, based upon the Indian cotton textile industry, indicates that 1,200 rupees will, under labour-intensive technique, create employment for 35 people as it was initially, while the capital-intensive technique will provide jobs for 5 workers at first, and by virtue of a large margin of re-investment, the additional employment will exceed 1,200 after 25 years. (2)

---

(1) International Labour Review. International Labour Office. 1958.

(2) The assumptions which are used here, are: (1) every penny paid in wages is spent on consumption and that (2) every penny not paid to labour went for reinvestment; (3) No allowance is made for capital depreciation. See Galenson & Leibenstein. op.cit.

For any year the employment stemming from any combination of men and machines is represented in the formula below:

(2)  $E_{t+1} = E_1 \left( 1 + \frac{p - ew}{c} \right)^t$ , where  $E_{t+1}$  represents employment in the  $t+1$  year,  $E_1$  employment in the initial year,  $p$  the output per machine,  $e$  the number of workers per machine,  $w$  the wage rate, and  $c$  the cost per machine. In case  $E_1$ ,  $p$  and  $e$  are assumed to be parameters, then the value of  $E_{t+1}$  will depend upon the relationship of  $c$  and  $w$ .

The conclusion derived from above formula is that, "the larger the proportion of the output of an industry, or a society, which is reinvested rather than consumed, the more rapid will be the process of capital accumulation and, *pari passu*, the growth of employment opportunities in industry.<sup>(1)</sup> Conversely, the greater the share of output that is consumed, the slower will be the rate of expansion of capital and employment.

II - On their explanation on the population effect of the capital-intensive technique, they resort to Malthusian views. They do not think there is a choice before underdeveloped countries between slow and comfortable economic growth and rapid investment and restricted consumption. The only rational way, according to them is to chose the latter view. Population growth must be reduced and the labour-intensive technique which results in this population growth should be

---

(1) Galenson & Leibenstein.op.cit. 354.

eliminated and, instead, the capital-intensive method should be adopted which induces falling fertility growth. Their rejection of the former method rests on the belief that self-sustained growth can be accelerated if there is an increase in the ratio of capital/labour, the per capita output potential and "per capita reinvestment quotient". The importance of population growth is because of this ratio between capital and the labour force. Population growth reduces the capital/labour ratio and, through its adverse effect on per capita output and savings, tends to reduce the rate of reinvestment as a consequence of any initial investment. They conclude that: "the lower the rate of population growth, or the earlier the decline in the rate of population growth sets in, the greater the per capita reinvestment quotient".

III - The same authors have advocated that modernization in the later stages of industrialisation will be rather difficult if, initially, a labour-intensive technique has been pursued in investment policy. They argue that a labour force, once called into existence on the basis of labour-intensive techniques, may strongly resist subsequent labour-saving modernization.<sup>(1)</sup> Another point they rest on is that a certain number of modern-capital-intensive plants

---

(1) See Galenson & Leibenstein, op.cit. This holds especially in democratic countries.

may also be a means of ensuring training and experience for management and labour in modern technologies. Modern technology promotes the skill of workers and the quality of the management.

The capital-intensive investment criterion, however, has been criticised from various aspects.

It is said that, if the government can find a way under the marginal productivity approach of keeping consumption down to the maximum that would be permitted under a capital-intensive approach, it may realise an even more rapid rate of investment.<sup>(1)</sup> A government has the power to influence the rate of consumption and of saving. Actually, it has a large number of instruments at its disposal such as - in a private enterprise or mixed economy - fiscal (taxation) and monetary policy, the price policy of the state enterprises, variations in the level of public services provided and variations in its foreign trade policy and so on. Therefore, a government can feel that it is in the interests of economic development to impose a rate of saving that might exceed the maximum rate that can be provided by any other alternatives. And secondly, one can ask, very rightly, why should people tolerate hunger and disease ( a rather low standard of living) more under capital-intensive criterion than any other alternative.

---

(1) International Labour Review. op.cit.

The applicability of the capital-intensive criterion has been tested by some authors in some underdeveloped countries. For instance, Prof.G.Ranis, has pointed out that, in Pakistan the rate of profit tends to be higher in labour-intensive than in capital-intensive undertakings. This result is contradictory to the G-L criterion that the capital-intensive technique is associated with higher profit rates.<sup>(1)</sup> However, in Japan, among manufacturing establishments employing more than 30 workers, the rate of profit on fixed assets was inversely associated with the capital-labour ratio during the 1950's.<sup>(2)</sup>

What emerges from the information above is that the capital-intensive technique has not an absolute value in claiming that the rate of profit is always lower in labour-intensive techniques. The test can vary from country to country.

On the employment effect of the capital-intensive technique, one can say that, underdeveloped countries, under the conditions of a serious unemployment problem have no choice other than resorting to a labour-intensive technique which is capable of absorbing a great number of unemployed workers. Especially where there is a pool of surplus labour, it seems urgent to employ more workers in as short

---

(1) Ranis G, Production Functions, Market Imperfections, and Economic Development.E.J.June,1962,p.354-54.

(2) Taira K "Japanese Enterprise Unionism & Inter Firm wage Structure, Industrial and Labour Relations Rev.vol.15. October 1961, p.33-51.

a period as possible, so that the burden on the economy may be lessened. However, investment projects which favour labour-intensive techniques must not ignore the importance of a productivity increase. In other words the productivity of labour should not be sacrificed for the sake of employing an unemployed labour surplus.

In Turkey, at the beginning of the plan period, there were about 1.5 million unemployed, and the labour force is estimated to grow at the very high rate of 2.3 per cent per annum during the Five-Year Plan. Therefore, under these conditions, we believe that the labour-intensive technique associated with the marginal productivity approach is a right decision.

Against the last point, it has been said that small - scale enterprises will be more favourable for wider training in entrepreneurship and management and wider diffusion of employment opportunities.<sup>(1)</sup>

We are of the opinion that a large undertaking is much more difficult to operate than of a small undertaking and, considering the scarcity of efficient managers, it will be plausible to concentrate more on small-scale businesses. It is true that the dispersal of savings and of entrepreneurship are important aspects of economic development,

---

(1) Belshaw -H."population growth and Levels of Consumption with special Reference to Countries in Asia, London, George Allen & Unwin, 1956.

even in countries in which the state has played an important part as provider of capital or as manager of business enterprises. (1)

The Turkish planners have intended to provide the dispersal of savings and investments more widely and thinly, and that is why, they very correctly, have adopted the marginal productivity criterion.

However, we are convinced that there may be certain industries which have a "process-dominated" nature and these industries, necessarily, will require the adoption of a capital-intensive technology. Therefore, we may conclude, that the marginal productivity criterion is compatible with the usage of the capital-intensive technique in some exceptional cases. It can also be added that the labour-intensive technique goes hand in hand with the capital intensive technique.

---

(1) See, Bauer, P.T & Yamey, B.S, *The Economics of Underdeveloped Countries*, London, 1957, p.201

BIBLIOGRAPHY.

1 -

- ADLER, J.H., The Fiscal and Monetary Implementation of Development Programmes, AER, May, 1952.
- AKTAN, R. DOC. Dr, "Türkiyede Nüfus Ve Gıda Yarışı", SBF Dergisi, Mart 1960, No.1.
- ALEXANDER, ALEC, P, "Turkey" in "Economic Development", Adamantios Pepelasis, Leon Mears, Irma Adelman, New York, 1961
- ALEXANDER, A.P., Industrial Entrepreneurship in Turkey: Origins and Growth, Economic Development and Cultural Change, Vol.VIII, 1959-60
- AUBREY, G.H, Investment Decisions in Underdeveloped Countries, in Capital Formation and Economic Research, National Bureau of Economic Research, 1955
- BALDWIN, R.E, & MEIER, G.M, Economic Development: Theory, History, Policy, John Wiley & Sons, Inc. New York 1964.
- BAUER, P.T, Economic Analysis and policy in Underdeveloped Countries, Routledge & Kegan Paul Ltd. London 1965
- BAUER, P. T, and YAMEY, B.S. The Economics of Underdeveloped Countries, London, 1957.
- BERZEG, K. Türkiye Gerçeklerinde Toprak Reformu, Forum, 1 Mayıs 1964, Sayı 242, and 15 Mayıs 1964, Sayı 243.
- BHATT, V.V, Capital-Output Ratios of Certain Industries, Review of Economic Statistics, August 1954,
- BRYCE, M.D. Industrial Development = A Guide for Accelerating Economic Growth, New York, Mc Graw Hill, 1960
- BUCHANAN, N.S. & ELLIS, H.S, Approaches to Economic Development, New York 1958.

- CHENERY, H.B., The Application of Investment Criteria, QJE, Vol, LXVII, 1953
- CHENERY, H.B., Development Policies and Programmes, Economic Bulletin for Latin America, Vol III, No.1, March 1958.
- CHENERY, H.B. Interdependence on Investment Decisions, in Abramovitz, M, "Allocation of Economic Resources," Stanford, 1959.
- CHENERY, H.B. The Role of Industrialisation in Development Programme, AER,
- CHENERY, H.B. Resource Allocation for Economic Development, Econometrica, October 1956 & AER, 1955
- CILLOV, H. Prof.Dr, "Türkiye Ekonomisi, Sermet Matbaasi, Semsî Arkadas, Istanbul, 1962.
- COOLE A, & Hoover, E, Population Growth and Economic Development in Low Income Countries, New Jersey 1958.
- CREAMER, D, Capital-Output Trends in Manufacturing Industries, 1880-1948, National Bureau of Economic Research, Occasional paper, 1954.
- DOBB, M, Economic Growth and Planning, Routledge & Kegan Paul Ltd., 1960
- DURBIN,E, Problems of Economic Planning,London, 1949.
- ECKSTEIN, O, Investment Criteria for Economic Development and the Theory of Intertemporal Welfare Economics, QJE, Vol.LXXI, Feb 1957, No.1.
- ELLIOTT, John.E, Economic Planning Re-considered, QJE, Vol 72, 1958
- FLEMING, M, External Economies, and the Doctrine of Balanced Growth, E.J. June, 1955.
- GALBRAITH, J.K. Economic Development in Perspective, Oxford University Press, London 1963.
- GALENSON, W & LEIBENSTEIN.H, Investment Criteria, Productivity and Economic Development, QJE, Feb, 1955, Vol LXIX, No.1.

- HANSON, A.H, Public Enterprise and Economic Development, London, 1960
- HERSHLAG, Z.Y, TURKEY: An Economy In Transition, The Hague, 1958.
- HIGGINS, B, Economic Development, Principles, Problems and Policies, New York, 1959.
- HIRSCHMAN, A.O. The Strategy of Economic Development, New York, 1965.
- INTERNATIONAL LABOUR OFFICE, Some Aspects of Investment Policy in Underdeveloped Countries, International Labour Review, Jan-June, 1958
- KAHN, A.E. Investment Criteria in Development Programmes, QJE, Feb. 1951.
- KAYA, O.A, Az Gelismis Memleketherde Planlama, SBF Dergisi, March, 1961.
- KELES, R.Y, Dr, Türkiye de Şehirlere Akin Ve Planlama Uzerine Etkisi, Planlama, D.P.Teskilati Dergisi, No.2, Cilt 1, Kis 1962
- KINDLEBERGER, C, Economic Development, McGraw Hill Book & Co, 1958.
- KIVANC, T. (MA) Yatirim Projelerini Iktisaden Degerlendirme Metodlari (Rate of Return), SPO, Planlama, No.5, Cilt; 2. Ilkbahar 1964, p.69.
- LEWIS, John.F, India, in "Planning Economic Development" Hagen, E.E, Richard D. Irwin, Inc. Homewoods Illinois, 1963.
- LEWIS, W.A. The Principles of Economic Planning, Unwin University Books, London, 1963.
- LEWIS, W.A. Theory of Economic Growth, Unwin University Books, George Allen & Unwin, Ltd., London 1963.
- MYRDAL, G. Economic Theory and Underdeveloped Regions, University Paperbacks, Methuen & Co. Ltd., London, 1964.
- NARASIMHAM, M. India's Third Five-Year Plan, IMF Staff papers, Volume IX, 1962

- NICHOLLS, W.H, Investment in Agriculture in Underdeveloped Countries: Turkey, AER, May, 1955
- NURKSE, R, Excess Population and Capital Construction, The Malayan Economic Review, The Journal of the Malayan Economic Society, Vol.11, No.2. October, 1957.
- O.E.C.D. Turkey, May, 1963, Paris.
- O.E.C.D. Turkey, August, 1964, Paris.
- PEP, An Independent Research Organisation, Planning, Vol.XIX, No.351, Feb, 1953, "Planned Development in the Less Developed Countries."
- POLAK, J.J. Balance of Payments problems of Countries Reconstructing with the Help of Foreign Loans, in "Readings in The Theory of International Trade", George Allen & Unwin Ltd. London. 1950.
- PREBISCH, R, The Economic Development of Latin America and its principal problems, U.N. Econ. Bulletin For Latin America, Vol.VII, No.1. Santiago, Chile, Feb. 1962.
- REDDAWAY, W.B. The Development of the Indian Economy, George Allen & Unwin Ltd., 1962.
- SACHS, I, Patterns of Public Sector in Underdeveloped Economies, Asian Publishing House, London, 1964
- SAVAS, V.F. DR, Dengelive Dengesiz Kalkinma Kriteri, Forum, 15 Agustos, 1964, Sayi, 249
- SAVAS. V.F. DR, Dengelive Dengesiz Kalkinma Kriteri, Forum 15 Ekim 1964, Sayi, 253
- SEN, A.K. Choice of Techniques, an Aspect of the Theory of planned Economic Development, Basil Blackwell, Oxford, 1962
- SEN A.K. Some Notes on the choice of Capital-Intensity in Development Planning, Q.J.E. November, 1957.
- SERIN, N. Dr, Turkiye niu Sanayilesmesi, Ankara Universitesi, SBF Yayinlari, No.167-149, Sevinc Matbaasi, Ankara, 1963.

- SERIN, N, Dr, İktisadi İstikrar Politikası, A. Üniversitesi, SBF Dergisi, Cilt XIV, No.4, Aralık, 1959.
- SHENOY, B.R. The Right Road to Indian Progress, Fortune, April, 1960
- SINGER, H.W. The Concept of Balanced Growth in Economic Development; Theory and Practice, The Malayan Economic Review, The Journal of the Malayan Economic Society, Vol III, No.2, October, 1958.
- SPO. (State Planning Organisation), Introducing Turkey's SPO, Ankara, 1963.
- SPO, First Five-Year Development Plan, 1963-1967, SPO, Ankara, 1963.
- SPO, Planning In Turkey, Special Issue, Summary of the First Five-Year Plan, No.1, Ankara, 1963.
- SPO, Planning, Publication No.14, Ankara, Sept, 1963.
- SPO, Programme For the Year, 1962, For Transition Into the Plan Period, draft, Ankara, 1961.
- SPO, Development Plan, First Five-Year 1963-1967, 1964 Annual Programme, SPO, Ankara, December 1963.
- SPO, Development Plan, First Five-Year 1963-1967, 1963 Annual Programme.
- SPO, Planning In Turkey, Review of the SPO, No.2, Ankara, 1964.
- SPO, Planlama, Devlet Planlama Teskilati Dergisi, No.5, Cilt 2, Ilkbahar 1964.
- TAIRA, K, A Note on the Analytical properties of Galenson - Leibenstein Investment Criteria, Bulletin, Oxford University Institute of Economics and statistics, Volume 27, No.2, May 1965.
- THE UNION OF CHAMBERS OF COMMERCE, INDUSTRY AND COMMODITY EXCHANGES OF TURKEY, The Economic Report 1961-1962, Ankara,
- TINBERGEN, J, The Design of Development, The Economic Development Institute, IBRD, 1958.

TINBERGEN, J, Central Planning, Yale University Press, New Haven and London, 1964.

UNITED NATIONS, Investment Trends and Policies in the Underdeveloped Countries, World Economic Survey, 1959.

UNITED NATIONS, Economic Development and Planning in Asia and the Far East, ECAFE, Economic Bulletin for Asia and Far East, Vol, VI, No. 3, November 1955

UNITED NATIONS, Economic Commission for Latin America, Economic Development, Planning and International Co-operation, Santiago, Chile, 1961.

UNITED NATIONS, Economic Commission for Asia and Far East, Programming Techniques for Economic Development, Bangkok, 1960

UNITED NATIONS, Measures for the Economic Development of Underdeveloped Countries, May, 1951.

UNITED NATIONS, Saving for Economic Development in the Underdeveloped Countries, World Economic Survey, 1960.

UNITED NATIONS, The Development of Manufacturing Industry in Egypt, Israel, and Turkey, Dept. of Economic and Social Affairs, New York, Colombia Univ. Press. 1958.

UNITED NATIONS, Economic Development in the Middle East, 1957-1958, Supplement to World Economic Survey, 1958.

ÜSTUNEL, B, Prof, İHRACATIMIZI. Arttırabilmek için Milletler Arası Anlaşmalardan Faydalanma İmkanları, İhracati Arttırma Semineri, Ankara, 1961.

ÜSTUNEL, B, Prof, Avrupa Müsterek Pazarının Türk Ekonomisi Üzerindeki Muhtemel Tepkileri, Türkiye Odaları Birliği Nesriyatı, Ankara, 1962.

VAKIL, C.N. And Brahmanand, P.R, Planning for An Expanding Economy; Accumulation, Employment and Technical progress in Underdeveloped Countries. Bombay, Vora & Co. 1956.

