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**The Impact of Structural Adjustment on the
Turkish Economy:
the 1980s and 1970s Compared**

by

Walid Adnan Kurdi

**A thesis submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy**

Department of Economics

The University of Durham

1993



- 5 MAY 1993

Abstract

The main issue that this research deals with is the evaluation of the structural adjustment policies adopted in 1980. Their impact on the Turkish economy is assessed, and comparisons are made with the 1970s. Econometric methods are used to assist the evaluation and two models, based on the Klein model I, are developed and compared. This study also includes an analysis of the changes that occurred at the sectoral level (agriculture, manufacturing, and tourism) as a result of the 1980 structural adjustment programme. In addition, the thesis contains a review of the literature on structural adjustment. An overview of the Turkish economy is provided including the economic policies implemented by different Turkish governments in 1978 and 1979.

The research findings show the need to stabilise the exchange rate. Inflation has been exacerbated by continuing depreciation. Domestic supply, in particular industrial production, is the key determinant of exports, not the exchange rate. In addition, floating interest rates, which rose substantially in the 1980s, appear to have a moderate positive impact on savings and credits. Also, the evidence suggests that structural adjustment has improved income distribution in Turkey. At the sectoral level, there is a need to increase investment in manufacturing, liberalise agricultural prices, and increase the role of tourism as a source of foreign exchange.

This thesis is dedicated to my beloved parents, brothers, and sister for their encouragement and invaluable support.

The work presented in this thesis was carried out at the University of Durham between October 1989 and September 1992. This material has not been submitted previously for any degree at this or any other university.

Signed

Walid Adnan Kurdi

Date

1st of February, 1993

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Chapter I

Introduction

1.1 Statement of the Problem: An Overview

Structural adjustment became a controversial issue in the last decade due to two reasons. First, as a result of the debt crisis in 1982; and second, due to the demise of the Soviet Union in the late 1980s. However, although the defeat of the planned economy theory paved the way for economic liberalisation, the latter has not been going smoothly. On the one hand, the liberalisation process created problems of its own such as increasing income disparities leading to social and political instability. On the other hand, structural adjustment programmes failed, in some cases, to achieve their objectives. Meanwhile, the Turkish government adopted a structural adjustment programme in 1980 after a long history of central planning. The results were considered encouraging leading both the International Monetary Fund and the Turkish government to claim that the programme was successful.

The Turkish economy provides an interesting case study of a developing economy given the low level of per capita income, reliance on a big agricultural sector and light industries for exports and growth, a large and dominating public sector, and the dependence on imported intermediate and capital goods for industrial production.

The Republic of Turkey was established in 1923, after the war of independence

following the defeat of the Ottoman Empire in the First World War in 1918. The leaders of the country headed by Mustafa Kamal (Ataturk) turned to the victorious west for inspiration to reconstruct their country's economy, politics, and even society and education. Thus, Turkey's history during that period was characterised by deep social, cultural, and economic reforms which mainly included the adoption of secular principles in the political life of the country.

As to the economy, the national leaders had a difficult task rebuilding the war-torn and long neglected economy left by the Ottoman Empire. After renegotiating their external debts and abolishing the so-called capitulations, the government adopted an official ideology called etatism or statism in the early 1930s after the world economic depression. This can be described as a domestic mixture of Soviet-style central planning and a Western-style free market economy. Etatism, until 1980, was committed to industrialise Turkey by means of import-substitution. It assigned a large role for the public sector to stimulate economic growth, investment, and industrial development. To meet these objectives, the government established its state economic enterprises (SEEs) with tax, tariff, and non-tariff incentives to private producers of import substitutes. The reliance of the government on Central Bank financing of its five-year plans and the deficits of the SEEs meant that money supply was increasing at alarming rates which intensified inflationary pressures. Moreover, after the Second World War Turkey took advantage of the Marshall Plan and easy credit markets at the time which allowed the authorities to launch a relatively liberal trade regime. However, by 1952, the overvalued Turkish lira and an increasing trade deficit prompted the Turkish government to resort to protective measures once again. The increasing reliance on short-term

foreign borrowing in the 1950s and the import-substitution policy, that relied less on export promotion, led to increasing pressures on the foreign exchange reserves culminating in high inflation and an IMF designed stabilisation and devaluation programme in 1958.

The Turkish government was committed to modernisation through three channels within the etatism principles. The first was direct public investment in infrastructure: transportation, power, education, housing and other areas. The second was indirect investment through the SEEs which had a large share in manufacturing and agricultural output, price determination, and employment. The third aspect of etatism was the government's system of incentives to the private sector through differential taxation and trade tariffs in favour of import-substitution industries and against traditional agricultural and industrial exports.

Although Turkey before 1980 followed an inward-oriented policy, it had relied on the international economy for capital inflows, imported productive inputs, and jobs for Turkish immigrants. In addition, Turkey's membership of international organisations, such as the OECD and NATO, helped secure foreign aid and concessional loans. The above two factors were important to stimulate economic growth and weather economic crises.

Starting from 1963, Turkey steered in a new direction with economic planning through five-year plans and annual programmes which were the responsibility of the newly established State Planning Organisation (SPO). The guidelines and plans were compulsory for the public sector while helping in the decision making of the private sector. This new era of planning allowed the Turkish government more control over the economy and meant that the development policy could be more

potentially effective. However, the economic planning of the SPO did not change the restrictive policies of the regime characterised by an overvalued exchange rate, fixed interest rates, import-substitution, discrimination against exports, and high trade barriers.

The establishment of the SPO did not immune Turkey from economic hardships as in 1970 Turkey was once again facing a shortage of foreign exchange needed to finance its debt service and imports. The crisis led Turkey to another IMF designed stabilisation programme with a devaluation on August 10, 1970, which attracted remittances from Turkish workers abroad whose immigration accelerated in the late 1960s. Thus a new phase in the economy started where over the following two years, quantitative and price controls were reduced, and reliance on the market system and incentives for attracting foreign investment were increased. The inflow of hard currency encouraged the government to embark on an ambitious five-year plan (1973-1977) with import-substituting industrialisation in capital-intensive sectors as its main objectives. This plan was important for Turkey's economic development which was seen as crucial for its economic integration with the EC. However, this demand-led growth did not last long with renewed inflation and increasing pressure on the balance of payments. Moreover, with the first oil shock in 1973 Turkey's oil import bill and its five-year industrialisation plan exerted a considerable pressure on the foreign exchange reserves which were depleted by 1977.

In April 1978 and July 1979, Turkey launched two austerity programmes undertaken in conjunction with two separate stand-by arrangements with the IMF. These included measures such as devaluation of the lira, promoting exports by increasing exports incentives, increasing bureaucratic measures on imports (licenc-

ing), and raising interest rates to attract savings. These measures had a minor effect on the economic situation due to political instability and violence at home and adverse conditions in the world economy such as the rise in oil prices and the increase in world interest rates in 1979. This with a reduction in remittances from Turkish workers abroad and a decline in exports due to the recession in the industrialised countries left Turkey with a foreign exchange crisis, record high inflation, and negative growth by 1979. In addition, international creditors lost their confidence in the Turkish economy and refused to lend it any money before substantial structural adjustment measures had taken place.

Turkey entered the 1980s in difficult economic circumstances. Inflation was accelerating, unemployment was rising, shortages were common, and social unrest reached high proportions. In addition, political violence was spreading throughout Turkey with an average of ten people killed every day. This situation followed the external shocks of the 1970s, macroeconomic mismanagement that extended for years, and severe political and economic instability.

The main problem was that successive Turkish governments wanted to achieve high economic growth rates (average of about 6-7% annually) disregarding the business cycles that the world economy was passing through. This isolationist economic policy was maintained by inflationary policies (increasing the money supply), foreign borrowing, and postponement of structural adjustments or adopting half-hearted measures when the need arose.

Confronted with these problems, Turkey needed to take immediate and substantial measures to reform its economy, and a new strategy of economic management was clearly necessary. In this respect, the Turkish government was convinced

that fundamental changes were required due to the domestic economic situation. On the other hand, there was international pressure from foreign lenders who stressed that no further loans would be granted to Turkey before it embarked on policies that would reduce its balance of payments deficit and improve the allocation of its resources.

Thus, in January 1980 the government launched its structural adjustment programme, under the auspices of the IMF, which aimed at the stabilisation and liberalisation of the Turkish economy. The short-term objectives of the programme were to reduce the inflation rate which reached more than 100% at the time, improve the balance of payment deficit, and stimulate export growth. The achievement of these objectives was expected to regain the international creditworthiness of Turkey. In the long-run, the programme aimed at adopting outward-oriented trade and more market-oriented policies in order to achieve a better allocation of resources. Thus, the economic direction of Turkey was transformed from import-substitution growth to export-oriented development.

When the adjustment programme was launched, no time table was announced with respect to the different measures that were going to be implemented which is usually the case with most IMF structural adjustment programmes. Nonetheless, subsequent actions revealed the basic elements of the policy measures. These included: the adoption of a flexible exchange rate with an immediate devaluation of the lira, export promotion to reduce the trade deficit and promote export-led growth, the liberalisation of trade by dismantling the quantitative restrictions and tariff structure on imports, tight monetary controls to reduce inflation and consumption, the deregulation of interest rates to stimulate savings, privatisation

of the state economic enterprises to encourage a greater role for the private sector, rationalisation of the cost structure in the SEEs, and the liberalisation of prices to improve efficiency and reduce the budget deficit.

In fact, most of these measures were implemented with devaluation as the most prominent due to its economic and social impact. The Turkish lira was devalued from about TL 31 per one US dollar to about TL 76. As a consequence, exports increased substantially after 1980 with an annual average growth of about 25% during the 1980-1985 period. Another feature was the sharp increase in the share of manufactured exports which rose from 36% in 1980 to more than 70% in 1985. This allowed for a reduction in the trade deficit from about US\$ 4.6 billion in 1980 to US\$ 2.9 billion in 1985. This was mainly due to the growth of imports (16%) at a slower rate than exports. The inflation rate declined substantially from about 110% in 1980 to about 36% in 1981 while the GNP resumed its growth at about 4% in 1981 after a negative growth of 1.1% in 1980. Moreover, fixed capital investment grew at more than 1% in 1981 after a 7% contraction in 1980. This occurred despite the increase in lending interest rates from 25% in 1980 to about 35% in 1981 (see chapter 3). These results were considered successful and pointed to the need to pursue more liberalisation.

Given the changes that occurred, certain questions need to be answered in this research: What was the role of the exchange rate in promoting exports? Was the import-substitution policy before 1980 of any importance for the success of the programme in increasing exports? What is the relationship between money supply, inflation and the exchange rate in the 1970s and the 1980s? What was the impact of trade liberalisation on exports and imports? What were the consequences of

interest rate liberalisation on deposits and credits? Does the depreciation in the exchange rate in Turkey have any side effects? What was the impact of structural adjustment on the three main sectors, namely agriculture, industry, and tourism? All these questions should be dealt with empirically and in comparison with the theoretical analysis of structural adjustment. It should be stressed that the core of this research will be to elaborate on the macroeconomic aspects of the structural adjustment programme and their impact, in comparison with the 1970s, and to reflect that in the context of development of the three main sectors in the economy. Finally, although the political developments in Turkey and internationally sometimes had an impact on the country's economic performance (military coups, Iraq-Iran war, ...etc.) these will not be discussed except in the case when these developments are directly related to the adjustment process.

1.2 Motivation for the Study

The motives for carrying out this research arose mainly from two reasons: the first one is personal while the other is objective. As to the first reason, the fact that I lived in a region (the Middle East) composed of countries adopting mainly inward-oriented policies and the failure of these regimes, so far, highlighted the need for a different approach to solving the economic problems facing the Middle East. Accordingly, the issue of liberalisation and structural adjustment became of great interest. As to the second reason, the vast and sometimes conflicting views in the literature on economic stabilisation and structural adjustment suggested the need to test these arguments in a country like Turkey; especially given the claimed success of the experience expressed by both the Turkish government and the IMF. Other factors that also contributed to the interest in this study included:

- The increasing role of the International Monetary Fund and the World Bank in international economic affairs and their growing influence in the Middle East.
- The problems that structural adjustment has faced in Africa and Latin America in the last two decades and the claimed success of the Turkish experience.
- The demise of the Soviet Union and the Eastern Bloc with the related defeat of their planned economy approach.
- The growing importance of Turkey as a regional economic, military, and political power and its growing influence in the politics and economics of the Turkish speaking southern republics of the Soviet Union.
- The lack of an up-to-date comprehensive and an overall econometric study of the Turkish economy separating the periods before and after structural adjustment.
- The rise of Japan and other south east Asian countries as economic powers with their protective economic policies and export-led growth.

However, as far as this study is concerned, this research will be strictly limited to an investigation of the structural adjustment experience in Turkey and no attempt will be made to answer or analyse the above mentioned factors.

1.3 Significance of the Study

The importance of the study emerges from a number of reasons. Firstly, it is the only one, to the author's knowledge, that deals with the Turkish structural adjustment experience in terms of two separate periods (before and after 1980) and

analyses the Turkish economy during that period sectorally and econometrically. Secondly, one of the purposes of this study is to raise issues and questions in a critical way related to the weaknesses of the 1980 structural adjustment programme and to indicate topics for future research of particular interest in the area. Thirdly, it is hoped that both policy-makers and academics will benefit from this study since many of the strengths and weaknesses of the present economic system in Turkey that have been analysed may be carefully taken into consideration in future attempts at liberalisation. Fourthly, the research may provide new insights and contribute to the development of this area of economics.

1.4 Aims and Objectives of the Study

The research was carried out to fulfill the following objectives:

- To assess, in an objective way, the effects of the structural adjustment programme in Turkey after 1980.
- To assess the validity of the theoretical aspects and assumptions of structural adjustment empirically.
- To compare the economic developments that occurred before and after structural adjustment and to assess the significance of economic reforms.
- To review the theoretical literature on structural adjustment.
- To raise issues of interest with respect to the strengths and weaknesses of structural adjustment in general.
- To prepare recommendations for policy-making and future lines of research.

1.5 Research Methodology

In order to achieve the objectives of this research, it was necessary to consider three aspects: (1) the theory of structural adjustment and the related literature, (2) an assessment of the impact of liberalisation on the sectoral level (agriculture, industry, and tourism) in comparison with the 1970s, and (3) a quantitative analysis for both the 1970s and 1980s aimed at testing the effects of the changes in the macroeconomic variables on the overall economic performance, comparing these results with the economic theory. It was thought that studying the above three issues was relevant in order to come to a comprehensive and reliable assessment of the impact of the 1980 structural adjustment programme on the Turkish economy as a whole given the inter-relationships between the changes in macroeconomic variables and the performance of the sectors. Unfortunately, all the studies, so far, ignore the latter part and stress the former; thus ignoring an important relationship that would give a better view of what is going on. The main sources of information that were used for the collection of data and the preparation of this study included:

1. Books, journals, papers, reports, surveys, newspapers, theses, and official publications, both Turkish and international. All these sources, were consulted regarding structural adjustment in theory, country studies liberalisation experiences in general and in Turkey specifically. They proved indispensable for the study.
2. Meetings and conferences: the opportunity to attend talks (organised by the Turkish Studies Centre) at Durham University and conferences proved invaluable. The most important included a conference at SOAS, University of Lon-

don, from 4th-5th April, 1991. These gatherings helped in clarifying issues related to the research and methodology followed. The above occasions were good opportunities to meet Turkish and non-Turkish academics and officials informally who suggested, explained, or approved certain lines of research followed in this study.

3. Meeting Turkish people in Durham and London who had frequent visits to their country was an important link between the author and Turkey. This link facilitated the updating of data and clarified some crucial points as the research progressed.
4. Contacting Turkish sources such as the Turkish trade attache in London and the Turkish Promotion Centre in Ankara which helped by providing the author with some unpublished material.
5. Econometric analysis: this source was of immense importance to this study as it paved the way for the conclusions and recommendations arrived at in the last chapter. The econometric techniques followed are explained in chapter 4. The statistical package used was Microfit, which was available at the Computer Centre of Durham University.

1.6 Limitation to the Study

This study, is essentially an evaluation of the structural adjustment programmes in general in the light of the recent Turkish experience after 1980. The study, however, is not intended to present a final solution to all the deficiencies and defects of structural adjustment or the Turkish economy. However, it is hoped that the

results arrived at in the research would be helpful for both Turkish policy makers and those working on structural adjustment. It must be stressed that due to the limited time, material, and data available and the wide scope of both the literature on the Turkish economy and structural adjustment, it was very difficult to carry the research any further. Unfortunately, the author did not have the opportunity to visit Turkey due to visa problems. Therefore, it was decided to concentrate on as many related issues as possible, which were important for the objectives of this study, within the structural adjustment perspective. Finally, it must be emphasised that this research is neither about structural adjustment nor about the Turkish economy but both; hence, all the views and analyses carried out are in that light. Any issue that was related to one aspect but not the other was excluded from the work.

1.7 Structure of the Study

This study was written up in eight chapters and a selected bibliography with the references used listed at the end of each chapter. While the first and last chapters were devoted to the introduction and conclusion respectively, the chapters from the second to the seventh cover the main body of the research. The contents of each chapter are summarised below:

Chapter one: states the problem, objectives, limitations, and methodology of the study.

Chapter two: illustrates the different arguments in the literature of structural adjustment programmes with an historical background on the World Bank and the International Monetary Fund (IMF) conditionality. Special emphasis was given to

the role of devaluation in structural adjustment due to its importance as a major policy followed in most programmes.

Chapter three: this includes the historical background and contemporary structure of the Turkish economy in the last two decades (1970-1988). It also includes the main features of the 1978, 1979, and 1980 structural adjustment programmes, a detailed analysis of the developments leading to the adoption of those programmes, a section on income distribution in Turkey, a section on Turkey's relations with the EC, and a section on Turkey and the Black sea region.

Chapter four: includes the econometric analysis of the Turkish economy in the 1970s and the 1980s separately. This helped determine the impact of the policies followed and the results achieved and whether they were in line with the theoretical expectations.

Chapter five: analysed the Turkish manufacturing sector with an emphasis on the textiles industry since it is the spearhead of Turkish exports. It also refers to the different export incentives used to help Turkish exporters, problems facing Turkish industry, capacity utilisation, wages, and other issues.

Chapter six: illustrates the developments and the structure of the Turkish agricultural sector before and after structural adjustment. There is a substantial amount of data regarding agricultural products, yields, area cultivated, machinery used, ... etc. Moreover, a section on the South Anatolia (GAP) project is included.

Chapter seven: contains an analysis of the tourism industry in Turkey. The chapter includes an analysis of the costs and benefits of tourism in Turkey, and considers the structure and problems confronting the sector.

Chapter Eight: includes the general conclusions, research findings and recommendations of the study.

Chapter II

Theoretical Background of Structural Adjustment Programmes

In this chapter there will be a review of the theoretical literature on structural adjustment programmes which the IMF adopts and is the subject of investigation empirically in the following chapters. Most of the arguments presented are concerned with the Fund's view of economic liberalisation. The discussion which follows has been divided into five sections: firstly, a brief historical background of the IMF's and the World Bank's conditionality will be presented; secondly, a definition of structural adjustment will be presented; thirdly, the various instruments used in structural adjustment programmes will be illustrated; fourthly, the politics of structural adjustment will be discussed; and finally, the last section will include the general conclusion of the chapter.

2.1 History of Structural Adjustment Lending

2.1.1 IMF Conditionality

The conditionality issue with respect to the IMF lending terms started with the establishment of the Fund. However, these conditions have been changing with time. Although the Fund has both conditional and unconditional resources, the increasing pressure on its funds, due to the increasing imbalances in the economies of the developing countries prevented the Fund from increasing the proportion of

resources made available unconditionally. For example, on the basis of historical data until 1978, the size of the Fund's conditional resources compared to the sum of the current account imbalances of some 111 countries of which data are available, fell from 50 per cent on average during 1966-1970 to about 20 per cent in 1977-78 (Williamson, J., 1983).

In the early stages of IMF conditionality, the Fund was concerned about setting conditions for the terms of its lending such as the conditions a member must satisfy in order to be eligible for a drawing on the Fund's resources. The main concern of the Fund was to protect its resources. As mentioned above, the deteriorating balance of payments' position of the developing countries, because of the large increase in imports and their uncompetitive, or cheap (agricultural) exports, and the limited resources of the Fund, obliged it to reduce its unconditional financial assistance. On the other hand, the decline in the Fund's lending capacity obliged it to tighten its conditions and to start prescribing certain policies for adjustment. The conditionality with adjustment was clear in 1974-75 when the IMF established an oil facility to provide balance of payments support after the increase in oil prices which left many developing countries with a deficit. Under the facility, the Fund member was allowed to borrow at low conditionality but required to cooperate with the Fund to find appropriate solutions for its balance of payments problem (Dell, S., 1981).

After the oil facility was in operation, the Extended Fund Facility (EFF) was established to deal with two main types of balance of payments problems: those associated with structural maladjustments in production and trade due to persistent cost and price distortions, and those involving a combination of slow growth and

an inherently weak external sector. Under the EFF assistance, a member country was required to present a one-year programme of measures to correct structural imbalance to be followed by corresponding programmes for the second and third years. However, the increasing lag between the capacity of the Fund to lend and the rise in payments imbalances necessitated the establishment of another facility, the Supplementary Financing Facility (SFF) which became operative in 1979. The resources of this facility were borrowed from oil-exporting and major industrial countries for a total amount of SDR 7.8 billion, where SDR 1 was worth about US\$ 1.3 at the time (International Financial Statistics, July-September 1980, p. 10). In 1980, the Seventh General Review of Quotas became effective and led to a 50% increase in quotas, which is considered relatively large. In addition to the resources available under the SFF, the Fund engaged in new borrowings to maintain an enlarged lending capacity. Moreover, an agreement was concluded in 1982 with the Saudi Arabian Monetary Agency that enabled the Fund to borrow up to SDR 4 billion a year for two years, with the possibility of additional amounts in the third year. In addition, an agreement was also reached under which the monetary institutions of 13 industrial countries agreed to lend SDR 1.3 billion to the Fund either bilaterally or through the Bank of International Settlements (Williamson, J., 1983).

As a result of these initiatives, the Fund's capacity to provide finance to support adjustment programmes was increased dramatically at the end of 1978 by nearly 90 percent. However, the relative capacity of the Fund to lend was only restored to the levels of 1975, far below that of any earlier period in the history of the Fund.

When the IMF raised the necessary funds needed for supporting member coun-

tries suffering from balance of payments deficits, it established guidelines in March 1979 on conditionality which stated that members should be encouraged to adopt corrective measures, which could be supported by use of the Fund's general resources in accordance with the Fund's policies, at an early stage of their balance of payments difficulties (Williamson, J., 1983). Moreover, the Fund revised its lending terms in the late 1970s and early 1980s in order to encourage members to undertake adjustment programmes which were set in a medium-term time frame and aimed at reallocating resources and demand management. These programmes were supposed to bring balance to the current account or at least a manageable deficit which could be easily financed in addition to economic growth and reducing inflation. To help achieve those objectives the Fund emphasises in its programmes the need to increase domestic savings, encourage net capital inflows, and reorder incentives and priorities to ensure that investment is directed particularly to projects and uses that would benefit the balance of payments. These measures were supported by the maintenance of aggregate demand within the constraints set by available financing.

2.1.2 The World Bank

Structural adjustment lending was introduced by the World Bank in early 1980 as one of several responses by the Bank to alleviate the pressure of growing payments difficulties facing many developing countries.

The World Bank outlined its first proposals for structural adjustment lending in its Annual Meeting in Belgrade, Yugoslavia in October 1979. The objective was to provide support for member countries already in serious balance of payments

difficulties, or to be faced in the years ahead with the prospect of unmanageable deficits arising from external factors. According to the Bank's sources (Wright, P., September 1980), to qualify for such lending, a country must be willing to adopt appropriate changes in its policies and programmes to enable its economy to adapt over a reasonable period to the changes in the international environment without sacrificing its long-term growth objectives. This meant reducing the current account deficit to a level commensurate with the amount of external capital which the country could expect to have access to on a regular basis, without straining its debt servicing capacity. Circumstances would vary widely from country to country and no two programmes of structural adjustment were supposed to be the same.

The Bank's adjustment programmes emphasised the need to increase the country's supply capacity to reduce the deficit in the balance of payments whereas the Fund's programmes concentrated on demand management. According to the Bank's sources, the objectives of the Bank's adjustment programmes sought to improve agricultural and industrial efficiency, to promote the expansion and diversification of exports on the basis of comparative advantage, to develop domestic energy resources more vigorously and improve the efficiency of their use, to restrain consumption, and to raise domestic savings rates. The composition of the public investment programme might have to be altered to give more emphasis to quick yielding investments and to encourage more effective use of existing capacity. Sometimes changes are required in agricultural pricing to stimulate domestic production. Tariffs might need to be restructured and imports controls dismantled as part of a long-term programme for making industries more competitive. Special incentives or the removal of existing disincentives might be needed to stimulate

exports or substitute for imports. Public enterprises might have to be reorganised and their management strengthened to reduce waste and inefficiency. These objectives can be categorised into four areas: (1) pricing policies, related to tariff reforms, fiscal incentives, budget subsidies, and interest rate policy; (2) revised public investment priorities in the light of the changed international price structure and resource availabilities, (3) improved budget and debt management; and (4) strengthening institutions particularly public enterprises (Wright, P., September 1980).

2.2 What are Structural Adjustment Programmes?

These are programmes composed of structural adjustment policies which are defined by Balassa (1982) as policy responses to external or internal shocks, carried out with the objective of regaining the pre-shock growth path of the national economy. External shocks may be caused by changes or shocks in the international economy such as the sudden increase in oil prices in 1973-74. Internal shocks may find their origin in inappropriate policies pursued in a country, such as excessive expansionary fiscal measures. Both kinds of shock adversely affect economic growth and the balance of payments.

The expression "structural" in the definition reflects the need for discrete, as compared to marginal, changes in policies in response to discrete shocks. Responding to these shocks will also necessitate a reordering of priorities as well as a reconsideration of policy instruments.

In general, the principle elements of a structural adjustment programme include production incentives, incentives to save and to invest, public investments

(particularly in energy and agriculture), budgetary and monetary policies as well as foreign borrowing, trade liberalisation, market determination of exchange and interest rates, privatisation, and some fiscal measures. These policies will be discussed in detail in the next section.

Balassa (1982) believes that in structural adjustment policies income distribution is considered a minor objective because the economic reforms needed to alleviate the impact of shocks impose limitations on the ability of governments to pursue several objectives simultaneously. Moreover, the IMF believes that economic growth should alleviate poverty through raising the standard of living to a level which may be regarded as the appropriate income distributional objective. Such growth policies are adopted with the intention of increasing productivity rather than increasing consumption. Hence, investment is given priority over consumption because when the investment share increases in the GNP, it will take less time to regain the growth path. Therefore, the application of an adjustment programme is usually accompanied by foreign borrowing to facilitate the gradual change in the economy where these foreign loans are expected to be used in productive projects.

Moreover, freeing price controls may contribute to improvements in resource allocation which may enhance the economic growth process, although with the possibility of an inflationary side effect. In general, price controls result in higher consumption and lower production, because these controls reduce incentives to increase existing productive capacity in the private sector; hence, necessitating formal or informal rationing and/or higher imports, probably with lower exports, to meet the resulting excess demand. All this places strain on the foreign reserves.

In the public sector, price controls lead to increased demand for the goods and services produced by that sector where the production needed to provide for this demand may be undertaken at a loss, for specific purposes mainly political; hence, increasing the pressure on the government's budget and possibly foreign reserves depending on the nature of these goods and services.

One of the major policies of an adjustment programme is currency devaluation which would increase incentives to exporters through the increase in demand for their products, and when accompanied with a lifting of tariffs on imports (which were imposed as a part of an import-substitution policy) domestic producers will still be protected as far as the tariffs that were imposed are higher, or equal to, the rate of devaluation (Cooper, R., 1971). However, if tariffs were less than the devaluation rate, this would increase the price of imported goods reducing the demand for them and; hence, alleviating the pressure on foreign reserves. Therefore, it is argued that a combination of currency devaluation and a reduction in tariffs may help in approaching an import-substitution and an export-promotion policy, simultaneously (the devaluation concept will be discussed in detail in the next section). Moreover, it is worth noting that the amount of change in exports is determined by the price elasticity of supply of exports in the home country and the demand elasticity of the country's exports abroad. The change in the amount imported is determined by the price elasticity of demand for imports and the income elasticity in the home country.

2.3 Main Tools of a Structural Adjustment Programme

2.3.1 Trade Liberalisation

Trade liberalisation is defined as any change which makes the country's trade system more neutral (it is necessary to define "neutrality" more sharply). A trade system is completely neutral if it operates as it would in the absence of government interference (Michaely, M., Choksi, A. and Papageorgiou, D., 1989). It is believed that trade liberalisation allows countries to realise gains by subjecting domestic production to foreign competition and by providing access to a wider market to achieve economies of scale and increase the skill of labour. However, some countries refrain from liberalising their trade and prefer to follow an import-substitution protectionist policy because they believe that this policy will ensure better economic growth and development while trade liberalisation would entail high costs and produce limited benefits.

Trade policy reforms emphasise the need to move from quantitative restrictions to economic tariffs, or in the case of high tariffs to reduce the value of these tariffs which are imposed on imported goods for the purpose of protecting domestic industries i.e., to change them into economic tariffs. This links domestic prices to foreign prices and allows greater access to foreign markets and inputs and increases competition. Another aspect of trade reform is the direct promotion of exports to offset the effects of the reduction in imports tariffs i.e., to compensate the reduction in the government revenues due to the cut in tariffs. Specific measures to promote exports such as export incentives risk acquiring a permanent status and lead to the postponement of more fundamental changes relating to industrial development

and trade. In addition, they create domestic lobbies that will oppose their removal, and risk countervailing duties from trading partners (Rajapatirana, S., 1987).

Trade liberalisation thus manifests itself in two ways. First, it emerges through a change in the price system that alters relative prices in the economy. The prices which matter here are those that serve as signals for production and consumption. The second manifestation is the change in the form of intervention, that is a move from rationing through direct government regulation, to the use of the price mechanism.

Experience indicates (Michaely, M., Choksi, A. and Papageorgiou, D., 1989) that a liberalisation policy introduced with a strong measure, rather than by minor and marginal policy steps, is likely to survive in the long-run. However, the country's history of trade restrictions is very relevant in this context. For the longer these restrictions have been in force and the greater their intensity, the more difficult liberalisation becomes. Therefore, liberalisation should, in general, be implemented in a short period of time and start with a major act that would make the policy more credible. Moreover, it is believed that the exchange rate is closely related to liberalisation, when the real rate increased (i.e., when currency depreciated), or remained stable, the liberalisation policy was mostly sustained; while when the real exchange rate fell substantially (i.e., when currency appreciated), the liberalisation experiment was most often doomed (Dornbusch, R. and Helmers, F., 1988).

As to the effect of liberalisation on the balance of payments, in most cases, liberalisation was accompanied by an expansion in the external sector (exports and imports). However, although both components of the sector increased, the growth

in exports was, in many cases, larger than the growth in imports. This increase in exports led to an increase in the foreign exchange reserves leaving the trade balance of the country in a better position. Nevertheless, there are cases where exports fail to respond to liberalisation while imports increase leaving the balance of payments in a deteriorating position (Corbo, V., De Melo, J. and Tybout, J., 1986).

2.3.2 Interest Rates

Interest rates ceilings on lending and deposit rates exist in many developing countries. Such ceilings are often justified on the grounds that unfettered interest rates would tend to be abused by the oligopolistic owners of domestic financial institutions. These ceilings have in some countries resulted in highly negative real interest rates; especially in countries with rapid inflation and a wide spread between loan and deposit rates. Such rates tend to be adjusted slowly to changing economic conditions (Dooley, M. and Mathieson, D., 1987).

Low or negative real interest rates tend to discourage savings and; hence, induce consumption or self-investment which is characterised by low returns usually (Balassa, B., 1982). Therefore, funds will be diverted from higher-yielding projects and incentives to invest or save abroad are encouraged leading to capital flight depriving the economy from investable funds and negatively affecting the exchange rate. In addition to that, low or negative real interest rates increase the demand for funds, which might be for unprofitable projects in a market determined interest rate; hence, giving rise to credit rationing and encouraging dissatisfied borrowers to turn to unofficial or illegal financial markets (Fry, M., 1982). Moreover, in

many cases, credit rationing by the banking system favours the inefficient import-substituting investments because of the lower risk they face due to the lack of foreign competition. At the same time, low or negative real interest rates provide the incentive for the expansion of capital-intensive industries and production methods; sometimes inefficiently.

On the other hand, market determined interest rates or “realistic” interest rates would increase savings and might reduce the demand for fixed assets that some savers would otherwise purchase. Also floating interest rates reduce the consumption of goods which include imported products and induce capital inflow instead of capital flight. In addition to that, only profitable high-yielding projects would be encouraged leading to economies of scale and better allocation of resources; hence, increasing productivity and economic growth.

Having said that, and after recognising the virtues of a free financial system, the question that comes to mind immediately is why developing countries refrain from liberalising their financial systems? In fact, there are many factors that deter them from reforming. These factors include the residual role the authorities want to retain in allocating resources and the unwillingness of the authorities to allow foreign institutions and markets to supply the financial intermediary services that are needed by the economy, despite the efficiency arguments in favor of such moves (Allen, M., 1982). Such restrictions have political reasons in addition to concerns about allowing the banking industry to be controlled by external owners. Moreover, recent studies of the financial reforms in Latin America (Corbo, V., De Melo, J. and Tybout, J., 1986) concluded that it is better to delay the full integration of domestic and external financial markets until inflation is brought under control

and the domestic financial system has been made more competitive.

2.3.3 Controlling Capital Outflow

There are several factors that lead to capital flight, some of these factors can be attributed to government policies while others are outside official control (Khan, M. and Ul-Haque, N., 1987). Some of these factors include:

i) *Overvaluation of the exchange rate*: it is believed that one of the major causes of capital flight is the fluctuation in the exchange rate. Other things being equal, an expected depreciation of the domestic currency would drive people to switch their assets from domestic to foreign ones. If the current real exchange rate is viewed as overvalued, then residents will expect that a devaluation will occur at any time; hence, it is reasonable for them to convert their domestic wealth into foreign claims in order to avoid the potential capital loss.

ii) *Financial Sector Constraint*: in a number of developing countries financial repression prevails where extensive controls on interest rates exist represented by ceilings on interest rates, high reserve requirement, and selective lending to projects. In most cases these restrictions lead to negative real interest rates or rates which are below the market clearing rate. This usually leads to less savings and an increase in the demand for credit. Therefore, in such situations it is rational for the domestic saver or investor who can not find domestic funds, to seek foreign assets that would yield higher returns. In addition, the usually dominating public sectors in developing countries and price controls reduce the opportunities for investing in the domestic market. Moreover, the lack of credible deposit insurance on assets held in the banking system is another factor that encourages domestic residents to

invest abroad and; hence, causing capital flight.

iii) *Fiscal Deficits*: in many countries, a fiscal deficit is usually financed by expanding the money supply through printing money and creating inflationary pressures. This provides incentives for residents to purchase foreign assets in order to avoid the erosion in the value of their deposits. Even when the deficit is financed through domestic or foreign borrowing, residents still expect that the government will resort to printing money in the end or raise taxes, which is also an incentive for them to move to foreign assets in order to reduce the potential tax liabilities or to protect themselves from inflation. On the other hand, deficits give the impression that the economy is not doing well; especially if they are permanent. This raises fears among domestic investors and drives them to seek investment opportunities abroad.

iv) *Risk Factor*: it is believed that there is a larger investment risk in the developing countries compared to developed countries. This relative risk stems from the political and economic instability of developing countries where the risk of expropriation and the imposition of exchange controls is possible at any time. In addition, there are inadequate legal and institutional regulations for the protection of private property in some developing countries.

v) *External Incentives*: the development of financial markets in developed countries and the better conditions they offer to nonresident investors are considered incentives for those investors in the developing countries, thus increasing the intensity of capital flight.

2.3.3.1 Consequences of Capital Flight

Capital flight has both short-run and long-run effects. In the short-run, an increase in the outflow of capital can have destabilising effects on domestic interest rates, exchange rates, and the country's international reserves position. The outflow creates a shortage of liquidity in the system which pushes interest rates higher. The capital outflow would also depreciate the domestic currency under a floating exchange rate regime. On the other hand, if the government is committed to defending a particular exchange rate, it depletes its reserves. In either case, capital flight causes short-run adjustment problems. Furthermore, when a country is facing a balance of payments crisis, residents would expect increasing inflation, devaluation, imposition of exchange controls and other restrictions which might intensify the capital flight. Thus, at the time the country badly needs capital inflows, capital is going out, and thereby exacerbating the crisis.

In the long-run, capital flight reduces the resources available to finance domestic investment leading to a decline in the rate of capital formation; hence, adversely affecting the country's economic growth. Also, capital flight reduces government revenues due to the inability of the government to tax all the income of its residents; hence, reducing the government ability to serve its debts. Finally, capital flight increases foreign debts because of falling government revenues and its inability to finance its expenditure (Khan, M. and Ul-Haque, N., 1987).

To cure the situation, adjustment programmes try to introduce macroeconomic policies with the appropriate exchange and interest rates because these tools are considered a key element in reducing resource transfers abroad and their consequences. In addition, it might be useful for countries to create a wider menu

of domestic financial assets for local investors, provide guarantees to investors to protect them from expropriating their assets, and introducing new policies to attract foreign investors such as reducing the tax on interest income of non-residents. Therefore, through changing the existing incentives in the economy, the authorities can minimise the amount of capital flight as well as attract capital from abroad.

2.3.4 Privatisation

It has been argued that public ownership is favourable because of the failure of markets to secure economic and social objectives and the inevitable tendency of certain markets towards monopoly; especially when technological factors or the market size imply that only one producer - a natural monopoly - can fully exploit available economies of scale. Examples of this are electricity and railways. Moreover, public ownership also gives governments social equity in employment and access to essential goods and services at an affordable price (Hemming, R. and Mansoor, A., 1988).

However, dissatisfaction with the public sector and public enterprises in particular is wide spread where the source of this dissatisfaction is not solely ideological. There are now great doubts as to whether the benefits of public ownership are worth the costs. For although government intervention might achieve some objectives, other problems emerge such as the interference of politicians in public enterprises' decision-making and pricing policies. In addition, managers in public enterprises are poorly motivated, badly paid, and inadequately monitored. These factors have combined to reduce the productive efficiency of public production leading to losses and heavy dependence on the government's budget support.

On the other hand, a private firm can be characterised as one in which the market of the product guides prices and output while the capital market constrains costs. A firm that cannot sell its products will not make profits; unprofitable firms will go bankrupt or be taken over. The market, therefore, regulates firms providing the incentive to achieve both productive and allocative efficiency.

One should bear in mind that the privatisation of public enterprises will not make them more efficient unless privatisation is followed by economic and financial liberalisation so that market forces are allowed to influence the activity of enterprises. In this context, it has been argued that it is inappropriate to dismantle protective barriers except in conjunction with privatisation, since continued financial backing by governments will permit public enterprises to exclude private competitors in a newly liberalised market.

Any government that intends to adopt a privatisation scheme must prepare itself for the social and economic costs it has to pay such as unemployment, closure of plants, higher prices and cutbacks in services which can be severe in the short-run. This is because the benefits of privatisation, such as increases in employment and investment, do not appear until the medium-term. During this period, the success of privatisation should be judged not in terms of the scale or contract itself, or the price paid to the government, or even the survival or expansion of the enterprise sold; but in terms of the net benefits that the economy gained as a whole (Shirley, M., 1988).

In summary, privatisation helps to strengthen the market forces, decentralise decision-making, strengthen managerial capabilities and incentives and improve the allocation of resources. On the other hand, governments must be capable of

providing a suitable environment for private sector development, promoting competition, regulating monopolies, providing the necessary infrastructure and delivering efficient services, and in general managing the enterprises and activities that remain in the public domain. In addition, it is believed that social objectives are better left to the public sector to achieve; because it can support loss-making activities of social value through cross subsidisation by profit making public enterprises. This is because in a liberalised market, the private sector will only undertake profitable activities and leave social needs to be met by other means.

2.3.5 Fiscal Measures in Structural Adjustment Programmes

These measures adopted in many Fund-supported programmes have frequently been chosen to meet a fiscal deficit target. Sometimes such measures have not been consistent with longer-term efforts of reform of the tax system or restructuring of expenditure policies to ensure durable adjustment with growth (Tanzi, V., 1982).

Tax reform (Gray, C. and Linn, J., 1988) can help remove distortions in incentives and resource allocation (thereby improving productivity) and enhances the revenue elasticity of the tax system by making it broader-based and more efficient. Taxes influence relative prices through their differing impact on supply and demand for different products or factors of production. Thus, over time, tax measures under a Fund-supported adjustment programme affect resource allocation and growth. In the short-run, given the different supply elasticities of the production factors, an increase in the rate of different taxes, though they may raise the amount of revenue, can have different effects on the supply and the balance of payments. In addition, harmonising taxes with the prevailing levels in other

countries may contribute to the elimination of disincentives to investment or of incentives to capital flight.

Improving the administration of taxes is a vital component of any adjustment process (IMF Staff, 1988). Some fiscal measures directly affect the external balance while others operate indirectly to affect the size and composition of aggregate demand, savings and investment, or the operational efficiency of some particular markets (e.g., road maintenance facilitates the marketing of exports). Measures also differ as to the size of their fiscal impact or the period over which they may achieve the desired effects. Some structural revenue measures might be time consuming to implement such as value-added tax; but their impact on revenue and its elasticity as well as on the efficiency of resource allocation, can be considerable.

One of the important aspects of any fiscal measure is durability, therefore only measures that have a sustainable effect must be chosen. Moreover, any decision to reduce expenditure can be reversed when the adjustment programme achieves its objectives. Hence, in addition to durable measures, there should be commitment from the government's side. On the other hand, measures that reduce the number of government employees, or that remove price controls or subsidies, may prove more durable on the expenditure side. Measures that enlarge the tax base, or that shift particular taxes from a specific to an ad-valorem basis may also be more durable and less susceptible to change or to being nullified by inflation (Tanzi, V., 1987).

Some tax measures might have a negative effect in the short-run, but this will change in the long-run. For example, the elimination of an export tax may reduce government revenues and increase the fiscal deficit in the short-run. However, in the

long-run, such a policy should generate an expansion in output and export earnings and add to fiscal revenues from other tax sources. In addition, fiscal policies in an adjustment programme should not have any negative macroeconomic effects such as higher inflation, rundown of international reserves, or a crowding out of private investment; because such effects would weaken the chances of success of the adjustment programme (IMF Staff, 1988).

In summary, structural fiscal measures cause concern on three areas:

1. They may have direct budgetary implications which may not be affordable in the short-run.
2. The medium-term efficiency gains to be derived from such measures are sometimes of uncertain magnitude or are likely to arise with a time lag.
3. Many structural measures may promote economic growth while worsening the external account in the short-run (e.g., increased growth may lead to increased imports).

2.3.6 Devaluation

Devaluation is considered the major tool in many structural adjustment programmes, this is because devaluation, presumably, tends to reduce the foreign prices of a country's exports in proportion to the devaluation. At these reduced prices, foreign demand for the country's exports will increase depending on the elasticity of foreign demand for the country's exports and the elasticity of domestic supply of export products. Similarly, on the import side, the initial effect of the devaluation is to raise the domestic price of imports, presumably leading to

some reduction in the country's demand for imported products. The size of this reduction depends mainly upon the elasticity of domestic demand for imports or the marginal propensity to consume (see the different approaches to the balance of payments below). However, it is worth noting that some economists (Krugman, P. and Taylor, L., 1978) do not expect devaluation to have a substantial negative effect on imports because the elasticity of demand for imports is likely to be low, in developing countries; especially when imports are concentrated on raw materials, semi-fabricated products, and capital goods which are needed for the country's industrial development.

As to whether devaluation leads to economic growth or not it is unclear. Devaluation might enhance economic growth or might have contractionary effects (Krugman, P. and Taylor, L., 1978). As to the view that devaluation enhances growth, it is believed that the principal effect of a devaluation on income is associated with the increased exports of the devaluing country and the induced stimulation of domestic demand through the multiplier effect, provided there are unemployed resources. In addition to the multiplier itself, however, there are limiting factors on the process of inducing output. These limits are: (1) the degree to which an increased output of goods and services is forthcoming without an extensive price rise in the devaluing country i.e., the capability of the country to exploit its unutilised capacity, and (2) the elasticity of demand for the country's exports. On the other hand, the reduction in real wages due to devaluation may reduce domestic demand (consumption) leading to a contraction in economic growth. Meanwhile, the impact of a devaluation on the balance of payments differs depending on the approach used in the analysis. There are three approaches for the balance of pay-

ments theory: (1) the absorption approach, (2) the elasticity approach, and (3) the monetary approach.

2.3.6.1 The Absorption Approach

It is emphasised that the net effect of the recovery in income and production on the foreign balance is not the total amount of additional production induced, but merely the difference between that amount and the induced increase in domestic absorption (sum of consumption and investment). This difference between the real production or income and real expenditure is called "Real Hoarding". The foreign balance is equal to the aggregate real hoarding of the economy as a whole according to the identity:

$$b = (1-c)y + d \dots\dots(1)$$

where b represents trade balance, c is marginal propensity to absorb equal to the marginal propensity to consume plus the marginal propensity to invest, y is income and d is the effect of devaluation on absorption. The income induced change in the balance (b), is accordingly equal to the income-induced change in real hoarding, i.e., the change in income, y , multiplied by the propensity to hoard $(1-c)$. The existence of the business cycle makes it plausible that c may be greater than unity, that an increase in income may stimulate an even greater increment in the absorption of goods and services into consumption and investment. If c is equal to or greater than unity, the foreign balance will not improve as a result of the increase in output. Under such circumstances, devaluation might be effective in stimulating recovery but not improving the foreign balance. Hence, at any rate, under conditions of unemployment, devaluation may be expected to exert a

favorable effect on production and employment (Alexander, S., 1952).

Therefore, the effect of devaluation on income, as well as the favorable effect on the balance of payments, if c is less than unity, must constitute the most attractive potentiality of a devaluation. If the country is at full employment, this potentiality does not exist, and the effects of a devaluation must depend on the more tenuous and less attractive direct effects of absorption and prices (Alexander, S., 1952).

The main criticism to the absorption approach is that it gives less importance to elasticities and changes in relative prices occurring after devaluation. Moreover, this approach does not explain the effect of changes in the terms of trade and unutilised capacity on income.

2.3.6.2 The Elasticity Approach: Marshall-Lerner Condition

This approach emphasises that for an improvement in the trade balance, following a devaluation, to take place, the price elasticity of demand for imports plus the foreign price elasticity of demand for the country's exports must be high enough (greater than one). This condition is necessary so that the change in the quantity of imports and exports demanded together is sufficiently great to offset the loss in foreign earnings consequent upon lowering the price of exports in foreign currency and to boost economic growth (Thirlwall, A., 1982).

However, the main criticism to the elasticity approach is that it used partial elasticities rather than total elasticities, thus ignoring the changes in costs, supply, income, and expenditure as a result of the devaluation.

2.3.6.3 The Monetary Approach

The essence of this approach is that a balance of payments disequilibrium must be considered as stock disequilibrium between the supply and the demand for money. Hence, the disequilibrium is seen as equivalent to changes in the level of international reserves. Therefore, any balance of payments adjustment policy can not be successful unless it equilibrates the money market. Thus, tariffs, devaluation, and expenditure-reducing policies can only rectify a deficit if they reduce the supply of money relative to the demand, or raise the demand for money relative to the supply. According to this approach, devaluation can not improve the balance of payments permanently because any increase in the demand for money as a result of devaluation will be matched by an equal rise in the supply of money; hence, prices and the stock of money rise in proportion, leaving the balance of payments position unchanged.

The main criticism to this approach is that it is misleading for the understanding of the causes of the balance of payments difficulties. These may exist, even if money markets at home are in equilibrium, due to real exogenous changes at home and abroad (Thirlwall, A., 1982).

2.3.6.4 Devaluation and Growth

A devaluation should in many cases be accompanied by expansionary measures to increase demand. In the same context, the supply-side effects of a devaluation will in most cases be negative. The price of imported inputs will rise by the full amount of the devaluation; although some argue that price increases of imports are usually less than the devaluation due to competition between importers, while

nominal wages and nominal interest rates are also likely to increase. Hence, an expansion of output is to be expected only in the event of an increase in demand sufficiently strong to offset the adverse supply shift.

However, devaluation might lead neither to a contraction nor to an expansion but to both of them. This view is built on the basis that with devaluation, the public will reduce its spending in order to restore the real value of its holdings of money and other financial assets. This reduction in expenditure will produce the required improvement in the balance of payments. Hence, for a country in initial deficit, the right devaluation will achieve just the right reduction in the real value of the money supply, and the deficit will cease. But once the public has retained its desired financial holdings, expenditure will rise again. Therefore, a key implication of this approach is that if the monetary authorities expand domestic credit following a devaluation to satisfy the new demand for money, the effects of the devaluation on international payments will be undermined (Cooper, R., 1971).

Other economists (Alexander, S., 1952) argue that since the main purpose of devaluation is to reduce demand; especially on imports, this objective could be achieved through alternatives to devaluation. Reducing demand may be attained through monetary policy by discouraging investment and consumption through tightening credit for example. It may be achieved by direct controls, such as investment licencing or rationing of consumers' goods. It may be applied over the whole economy, as in the form of a sales tax or income tax, or in selected spheres as in the form of imports controls. The means to reduce consumption are many and varied, but they may all be characterised as domestic measures calculated to change the relationship of consumption to income; hence, to affect the foreign

balance. However, it is generally recognised that under conditions of widespread unemployment a domestic expansion policy is appropriate and any adverse effects on the foreign balance can, except in extreme cases of inelasticity of foreign demand and supply be appropriately handled by devaluation rather than by policies reducing consumption. Reducing consumption becomes an attractive policy only as full employment is approached. If such policies lead to unemployment, they are undesirable and other policies such as import restriction or devaluation would be preferable.

One of the side effects of devaluation is that it redistributes income in two directions: first, from wages to profit earners because of lags in the adjustment of wages to higher prices; second, from the private sector to the public sector because of the existing structure of taxation. Hence, if profit recipients have a lower marginal propensity to spend than wage earners, or if the public sector has a lower propensity to spend than the private sector, absorption or consumption will decline for a given level of real income and; hence, contraction occurs in economic activity (Dornbusch, R. and Helmers, F., 1988).

Whether devaluation leads to a contraction or an expansion in economic activity there is no final answer. Empirical studies (Cooper, R., 1971) conclude that devaluation may, in general, improve the trade balance and the payments position within the first year, it does lead sometimes to a deterioration in the terms of trade and inflation, but not by amounts great enough to undermine the devaluation. Real wages do fall in most cases, however sometimes they rise again due to the growth in the economy and the pressure from labour unions.

In the end, what is of interest is a comparison of the path of some measure of

real output, real income, employment, and inflation in the absence of devaluation, with the same path applied after a devaluation. The literature has not yet produced such a comparison, and it remains an important topic for future research.

2.3.6.5 The Exchange Rate Policy after Devaluation

An important question is which policy should be followed after devaluation with respect to the exchange rate determination? Many countries devalue their currencies hoping that this will solve, or at least help alleviate the impact of their economic problems; but what is of interest is which policy should these countries follow after devaluation? Do they have to adopt a flexible exchange rate or continue in their fixed exchange rate policy? Of course, adjustment programmes support flexible exchange rates; but is it the right policy? In what follows I will try to put the different arguments for and against flexible exchange rates.

Much of the earlier support for flexible rates was based on the weakness of the pegged and fixed rate systems. Flexible rates were expected to isolate a country from monetary disturbances originating abroad and to help control domestic monetary growth. It was also expected that flexible rates would lead to an external adjustment without exchange crisis or the need for controls on trade and capital flows. Those who supported flexible rates believed that there was a long-term trade-off between inflation and employment, and saw exchange rate flexibility as the appropriate policy for countries that want to adopt price-employment objectives. It was also widely believed that flexible rates would help to achieve stable growth, in particular by providing a significant measure of insulation from external shocks, real, as well as monetary.

As to the relation between flexible exchange rates and the inflation-employment trade-off, it was believed that countries can not maintain the same inflation rate in the long-run. Hence, differential rates of inflation will lead to exchange rate adjustments, and flexible exchange rates were seen to provide the least inconvenient form of adjustment.

Since, as some economists claim, there is a trade-off between inflation and unemployment (Phillip's curve), countries are free to choose their inflation rates. The choice of the inflation rate came to be seen as an important prerogative of government, and flexible exchange rates were going to make it possible for each country to maintain its optimal inflation rate. The notion that countries were faced with a trade-off between inflation and unemployment enjoyed considerable vogue during the 1960s, following Phillip's article in 1958. A notion can be made here that there was no significant long-run trade-off between inflation and unemployment according to studies made on economic behavior by Friedman (1966) who believes that the true trade-off is between unemployment today and unemployment at a later date. It is not between unemployment and inflation. There is no long-run, stable trade-off between inflation and unemployment.

Supporters of the flexible exchange rate system (Dornbusch, R. and Helmers, F., 1988) believed that in the long-run, flexible rates would ensure that at any level of economic activity, the supply and demand for foreign exchange originating from current account transactions would be consistent with the foreign investment flows that reflect longer-run differences in propensities to save and in investment opportunities among countries. In the short-run, they would ensure that financing flows would be available to offset any short-run excess demand for, or supply

of, foreign exchange originating from current account transactions and longer-run foreign investment flows without large variations in the exchange rate. Demand-management policies would thus be free from external constraints.

Many of the advocates of flexible rates were careful to clear the point that flexible rates were not an instant cure for all external adjustment problems. They recognised that, in particular, imbalances inherited from the fixed rate period could not be eliminated overnight. More generally, they realised that trade flows would adjust to exchange rate changes, only after a certain lag. It was also appreciated that, where underlying economic conditions were unstable, private capital flows might be insufficient to prevent some exchange rate overshooting; while adjustments in the goods market were taking place. On the whole, flexible rates were expected to prevent recurrence of the external maladjustments and to gradually eliminate the imbalances inherited from the past at the cost of exchange rate stability (Artus, J. and Young, J., 1979).

To a large extent, these expectations have not been realised. For example, the adjustment process in the goods market has not worked well in countries like the Federal Republic of Germany, Japan, and Switzerland which maintained very strong current account positions, despite the appreciation of their currencies both before and after the establishment of flexible rates. On the other hand, the United States continued to experience recurring current account deficits despite the marked effective depreciation of the US dollar during 1972-1978, the same period when the three above mentioned countries were enjoying a current account surplus.

Artus and Young (1979) conclude that flexible rates can play a useful role

only if three interdependent conditions are met: (1) there is a supporting demand-management policy, (2) changes in the relative prices between domestic goods and foreign goods are sustained, and (3) a shift in relative prices leads to a switch in domestic and foreign demand for foreign and domestic goods, so that there is no fall in the level of output.

Another major argument for flexible rates is that they would make it possible for national authorities to achieve more stable rates of growth in the economy. The argument was based on three propositions: (1) flexible rates insulate a country's level of economic activity from expansions and contractions in the world economy, (2) flexible rates increase the degree of control the authorities have over the money supply and allow them to use both monetary and fiscal policy to influence the level of economic activity, without constraint from the external balance, and (3) the efficacy of monetary policy is greatly enhanced by flexible rates, that is, the effect of a given change in the money supply on the level of economic activity is larger under flexible rates.

The conclusion of greater insulation from variations in economic activity abroad under a flexible exchange rate system is based on the assumption that a real external disturbance leads to an exchange rate change which prevents the external disturbance from having an effect on the domestic economy. However, this might not be the case, for example, if a fall in foreign demand results from a recession abroad, accompanied by a decrease in the rate of return on investment, capital may tend to move to the home country, where the level of economic activity is sustained, and the interest rates, may be higher. Accordingly, some economists (Modigliani, F. and Askari, H., 1973) argue that this factor may more than off-

set the effect of the worsening of the trade balance so that the exchange rate may appreciate rather than depreciate; hence, reducing the competitiveness of the country's export products which might be already in a difficult position due to the recession abroad. In this case, flexible rates would increase the impact of foreign disturbances on domestic economic activity rather than insulate it.

As to the relation between flexible exchange rates and the control of the money supply, it is thought that flexible rates would allow the authorities to control the money supply but at the expense of disregarding the developments in the exchange rate. Such a condition led in many cases to exchange rate instability, where some economists (Dornbusch, R., 1977, and Artus, J., 1976) focussed attention on the high elasticity of the exchange rate with respect to changes in the money supply. Even if the money supply is kept stable, exchange rate instability may be a problem because of the short-run instability of the demand for money.

The argument that flexible rates enhance the efficacy of the demand-management policies, particularly monetary policies is doubtful. The response in the volume of foreign trade flows, for example, to a change in the exchange rate is likely to be so small in the short-run that additional expansionary effect would not be noticeable, unless there is quite large unutilised capacity. A further weakness in the efficacy argument is that price increases caused by the exchange rate depreciation sharply reduce the expansionary effect of the increase in the money supply. Monetary policies affect the level of economic activity only if prices in the goods markets adjust slowly to a monetary change. By speeding up the price adjustment, flexible rates reduce the efficacy of monetary policies. In addition to that, flexible rates prevent the authorities from reliably estimating the quantitative effect of a certain change

in monetary policies. This effect will depend to a large extent on the behaviour of the exchange rate and the magnitude and timing of the effects of exchange rate changes on prices, and on the level of economic activity in the short-run (Artus, J., and Young, J., 1979).

Is the floating exchange rate system stable? It is believed that flexible exchange rates would reflect the underlying economic conditions and as long as these conditions are stable, exchange rates would also be stable. The underlying economic conditions in question were not precisely defined, but the impression that was left is that exchange rates would move only to the extent necessary to offset differential rates of inflation and to compensate for changes in real factors, such as tastes and production techniques, that usually take place gradually.

Moreover, Artus and Young (1979) claimed that opponents to the flexible exchange rate argued that volatility is to be expected in an "auction market" such as the exchange market under floating rates simply because there are incessant surprises.

It is suggested that at every point in time, the exchange rate must be at a level such that the amount of financial assets denominated in a particular currency equal the amount that market participants desire to hold. This is not to say that relative prices in the goods markets do not influence exchange rates, but the adjustment process in the goods markets works so much slower than in the financial asset markets that they play a somewhat secondary role in the short-run.

Another reason for exchange rate instability may be the cyclical variations in the demand for foreign exchange originating from trade or financial activities

that may be sustained for a number of years and may lead to large exchange rate movements because of a lack of investors with both the funds and the willingness to take a longer-run open position.

In addition to the above mentioned reasons for exchange rate instability, other reasons exist such as the existence of current account imbalances and the existence of a multiple reserve currency system in the central banks where any major action to change the composition of these reserves could lead to sharp exchange rate movements and disorderly market conditions.

What are the costs of exchange rate instability? The detrimental effects (Artus, J., and Crockett, A., 1978) of flexible rates include: (1) a reduction in foreign trade, (2) a decline in foreign investment, (3) adverse effects resulting from changes in the value of reserve currencies, and (4) price instability.

Exchange rate flexibility by increasing the uncertainty associated with international transactions, would discourage both foreign trade and international investment. Foreign trade could be discouraged due to the risk included in exchange rate changes during the period between contract and settlement, or due to the risk of changes in the relative cost and price competitiveness of countries because of exchange rate changes. However, supporters of flexible rates defended their concept on the basis that forward markets could be used to take care of the first type of risk and that over the long-run exchange rate changes would reflect changes in price and cost competitiveness.

As to the possible instability in prices due to flexible exchange rates, it is argued that undue reliance on the exchange rate to correct certain external and domestic

imbalances can push a country into a vicious circle of depreciation and inflation. For currency depreciation may lead to price increases, owing to the presence of imported goods in the price index, and this in turn leads to an increase in wages that would lead to further increase in prices; hence, the need for more depreciation to preserve the country's competitiveness leading to a further feedback to prices, wages, and the exchange rate. However, it is believed that price and wage effects and vicious circles would have very limited effects on inflation if the authorities do not accommodate incipient domestic costs and price increases by following expansionary monetary policies. Thus, it is demand-management policies rather than flexible rates that are the fundamental factor, and the case for a positive association of flexible rates and inflation rests on the view that there may be occasions when the authorities feel constrained to accommodate incipient domestic cost and price increases rather than accept temporary unemployment.

2.4 The Politics of Structural Adjustment

Whether structural adjustment programmes are recommended by the IMF or other agencies, or began spontaneously out of domestic considerations, they go to the very heart of structural transformation. These programmes with measures such as devaluation (leading to a decline in real wages) and increasing prices (by reducing government subsidies) have the potential of sowing political unrest due to the withdrawal of privileges that many social and economic groups enjoyed under import-substitution. Thus, structural adjustment is accompanied by a high political price; especially in countries that undertook adjustment as a last resort. The political price may take the form of riots such as in Morocco and Tunisia in 1984, and Jordan in 1989, and may even lead to the fall of governments (Richards,

A. and Waterbury, J., 1990).

Countries that engage in structural adjustment under pressure from the IMF or the World Bank find that the pressure becomes a domestic political issue as no political leadership likes to appear to be bowing to external forces; especially when what is at stake is a purely domestic issue. In Turkey, for example, none of the major political leaders in the 1970s could afford to advocate belt tightening (Barkey, H., 1990).

From what preceded, it may be politically wise for the leadership to make great efforts to maintain the best possible relations with different political parties or even with critics within the one ruling party rather than risk isolation or retaliation by those opposed to the reforms. Hence, it may be wise to arrange for compensatory payments to those who will be disadvantaged by the process of liberalisation; especially public sector managerial elites and organised labour who are usually well entrenched in the politics and economics of the old system. Moreover, if these prove rebellious, the leadership must make sure that other groups such as students will not be involved (Nelson, J. et. al., 1989).

In this respect, in order to avoid any major social or political unrest it may be recommended that structural adjustment be phased out if there is no urgent need for a quick implementation of the new measures. The stages and policy priorities may be left to individual countries and their circumstances although it is generally agreed that trade liberalisation should come first followed by the liberalisation of domestic financial markets and only then by capital markets (Dornbusch, R. and Helmers, F., 1988). Otherwise, only in cases when a new regime comes to power through a coup or the ballot box is the leadership likely to be supported by a

consensus sufficient to allow it to lay out policy goals and to stick to them without jeopardising the cohesion of the regime (Nelson, J. et. al., 1989).

2.5 Conclusion

From what preceded one can realise that there is no final conclusion with respect to the effect of implementing the different adjustment policies, previously discussed, on an economy. Does devaluation lead to growth? Inflation? Or a viable current account? There is no final answer. In addition, empirical studies do not give any clear cut evidence as to the effects of adjustment policies on the economy for the results obtained vary from country to country. Hence, what can be concluded is that the measures prescribed in adjustment programmes are the second best or the least worse where the ultimate benefit is left to individual governments to attain and amend policies according to the economic environment and political conditions prevailing in each country.

It is worth mentioning that a conducive political environment before and after implementing structural adjustment programmes is essential for the success of the programme. Hence, it is recommended that the different policies of any programme be phased in slowly unless there is an urgent need for change. This is expected to quell any serious opposition to the liberalisation policies followed.

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Chapter III

A History of the Turkish Economy since 1970

3.1 Introduction

Turkish governments had been strongly committed until the beginning of 1980 to rapid growth and modernisation through industrialisation and import-substitution policies. This commitment was reflected in the GDP average annual growth rate which reached during the First Five Year Plan (1963-67), Second Five Year Plan (1968-72), and Third Five Year Plan (1973-77) 6.4%, 6.7%, and 7.2% respectively. However, this growth in GDP was achieved without any significant resources of oil or minerals, leading to an increased strain on existing resources and capabilities. On the other hand, the necessity to build an infrastructure and an industrial base for the growing economy increased the strain on Turkey's resources because of the government's inward-oriented policies.

The public sector played a key role in Turkey's economic development. During 1963-79, its share in total fixed investment fluctuated around 50%, and its share in fixed investment in manufacturing increased from 21% to about 49%. Nevertheless, the private sector played an important role as investment in this sector increased by 11.5% per annum in real terms during 1967-77 compared to an annual average increase of 4.8% between 1963-67.

However, Turkish development during 1963-77 was suffering from several weaknesses. First, the level of exports was only 4% of GNP in 1977 compared to im-

ports which represented about 20% of GNP. This highlights the vulnerability of the Turkish economy and its balance of payments and the need to increase exports to increase foreign exchange revenues necessary to finance the economic development. Second, there was a lag in savings necessary to finance domestic investment. The lack of necessary credit led in the mid 1970s to a relatively high level of external borrowing and domestic inflationary pressures originating from excess demand. Third, the industrial sector was dominated by inefficient State Economic Enterprises (SEEs). The SEEs were suffering from increasing deficits and creating a heavy burden on the budget; hence, they further increased the inflationary pressures since their investment programmes were financed mainly through borrowing from the Central Bank.

In August 1970, the Turkish government devalued the lira due to the increasing difficulties facing the economy. As a result, the exchange rate was increased for the following products: imports by about 50%, traditional agricultural exports (tobacco, hazelnuts, dried fruits, and raw cotton) by 28%, and manufactured exports by 7%. It is quite possible that it was the weak performance of exports that constituted the single most important factor leading to the 1970 devaluation. The new exchange rate policy proved to be quite successful as it was followed by three years of rapid increase in foreign exchange receipts which made it possible to increase imports and accumulate foreign reserves. In addition to that, the total value of exports increased from US\$ 537 million in 1969 to US\$ 1,317 million in 1973.

After 1973, Turkey faced growing external imbalances created by the sharp increase in oil prices, the increase in the prices of imported industrial supplies and

investment goods, the world recession which adversely affected Turkish exports of goods and services, and a reduction in Turkish workers' remittances. Given these factors which were mainly external, the Turkish governments should have revised their development strategies and followed more stringent economic policies. Yet, instead they preferred to sustain the high rate of growth during 1974-1976 at the expense of internal and external balances, postponing the crisis to 1977.

In 1977, current account deficit reached US\$ 3.4 billion compared to US\$ 718 million deficit in 1974. The rising external deficit was met first by a reduction in Turkey's foreign exchange reserves and later on by borrowing, mainly on a short-term basis from the Euromarkets. These sources of borrowing began to dry up in 1977 and substantial arrears accumulated. By the end of 1977, Turkey's short-term debt and trade arrears reached US\$ 14,425 million equally divided between short-term and medium-long term. By 1979, total debts reached US\$ 13,604 million.

3.2 Factors Leading to the Foreign Payments Crisis

There are external and internal factors leading to the foreign payments crisis and the recession following it (TUSIAD, 1980). The external factors include:

1. The adverse effects of the increase in oil prices on the balance of payments, production, and employment.
2. The increase in the prices of industrial raw materials and investment goods that Turkey had to import.
3. The recession in the west caused by the rise in oil prices adversely affected Turkish workers' remittances and Turkish exports.

The internal factors include:

1. The government commitment to the growth in GNP led to an increase in consumption during the crisis creating excess demand; hence, increasing the rate of inflation and the pressure on imports and foreign reserves.
2. Government subsidisation of a number of commodities including petroleum, encouraged their use leading to more pressure on foreign exchange reserves.
3. Deficit financing, partially due to the losses in state economic enterprises which increased the money supply; hence, exacerbating inflation.
4. Agricultural support pricing policies increased the budget deficit and consequently inflation.
5. Successive devaluations failed to promote exports and induced new rounds of price increases.
6. The rates of increase of various incomes far exceeded the rate of increase in real output; hence, increasing the inflationary pressures.

The outcome was that although demand was expanding, GDP decreased by 0.3% in real terms and exports were reduced by 1.2% in 1979.

It is clear from what preceded that Turkey should have scaled down its consumption while expanding its productive base so that its resources would have been employed in an export-oriented policy or at least to meet the excess demand that would alleviate the pressure on foreign reserves. On the contrary, however, during most of that period, the rules of a market economy were ignored and governments

dealt with the problems facing them (mainly those related to the external balance) by more bureaucratic interference and quantitative controls.

The crisis which started in 1974 and was postponed to 1977, like its predecessors in 1958 and 1970, was primarily a foreign exchange crisis. By the end of 1977, Turkey with an import bill of US\$ 5.8 billion had only US\$ 1,733 million of exports. Workers' remittances provided another billion dollars; hence, leaving a huge US\$ 3.4 billion gap to be financed. The gap which was of similar size in 1976 was financed by massive short-term external borrowing and a complete running down of foreign exchange reserves. By the end of 1977, the situation came close to a crisis with foreign lenders declining to make further loans, commercial arrears close to US\$ 2 billion and the economy unable to grow without imports that could no longer be financed.

The wholesale price index rose by 16% in 1971, 18% in 1972, and 20.5% in 1973, making an average inflation rate of 18.2% per annum in 1970-73. Between 1973-76, the annual spread between Turkey's domestic inflation and worldwide inflation remained between 8 and 10% points. Turkey did start a series of minor exchange rate adjustments in this period devaluing the Turkish lira against the US dollar by an average of 5% points a year. Consequently, the upward drift in the price deflated exchange rate continued slowly but steadily. From 1974 to 1977, export revenues grew very slowly, officially recorded workers' remittances declined by about 40% and imports almost tripled.

Between 1970-73, exports and imports were growing at about the same rate while workers' remittances grew somewhat more rapidly with the sum of exports and remittances overtaking the value of imports which jumped from US\$ 2.1 billion

in 1973 to US\$ 3.8 billion in 1974, growing by 80% in one year. The foreign exchange gap created by this sharp increase in imports in 1974 was still moderate, consisting of US\$ 819 million or about 2.8% of GDP.

It is thus quite clear that the crisis was already apparent in 1975 and the situation did not improve in 1976 or 1977. On the contrary, in 1977 the foreign exchange gap reached US\$ 3 billion which in March 1978 constituted 9% of GDP. The gap was temporarily closed by massive international borrowing and the running down of the foreign exchange reserves that accumulated in 1972 and 1973. But by the end of 1977, there were no more reserves to be run down and Turkey's borrowing capacity reached its limits.

In August and September 1977 several measures were taken to try to extricate Turkey from economic turmoil.

3.3 Demirel's Austerity Package (August and September 1977)

This package included measures to (TUSIAD, 1980):

1. Try to boost Turkey's exports and correct its balance of payments deficit.
2. Fight inflation.
3. Step up the pace of investment, help solve the financing problems, and decrease the excessive losses of state-run industries.

3.3.1 Export Promotion

A total of sixteen measures were introduced to boost Turkey's exports, these included simplification of export formalities, providing new facilities to Turkish mi-

grant workers to import their professional equipment, rearrangement of the system of customs duty concessions and exemptions, and allowing Turkish firms to import goods up to the value of 50% of their convertible lira deposits in the Central Bank with a two or more years spread.

3.3.2 Fighting Inflation

Measures to fight inflation included the following:

1. No deficit-financing credits to be furnished by the Central Bank for budget or state-run industries.
2. Production to be boosted and state aid to be provided for the completion of private sector investments and incomplete projects.
3. Credit sales were limited to 12 months (a move designed to curb consumer demand).

3.3.3 Decreasing the Losses of the SEEs

The government could no longer shoulder the losses burden of SEEs which reached about TL 40,000 million. Therefore, price increases were introduced on a number of basic goods and services such as petrol, cement, steel, paper newsprint and other goods. These increases ranged from 100% to 15% and did not include goods like sugar, tea, salt, and coal. The extra cash was planned to be used to balance the budget.

Another measure to prevent the outflow of hard currencies was introduced when the government announced that Turkish tourists could not claim more than

a total of US\$ 600 worth of foreign currency in one year for travelling abroad. Previously, every Turk was allowed a tourist trip three times a year.

3.4 Ecevit's Austerity Package

Ecevit's government implemented stage by stage the long overdue measures to check inflation, curb the foreign exchange drain, and promote savings.

Turkey entered 1978 with a standstill in foreign exchange transactions, overdue convertible lira deposits, growing liabilities in the form of imports on credit and some partial attempts for stabilisation.

To get out of the economic crisis facing Turkey, the Ecevit government was determined to do two things at the same time (TUSIAD, 1980):

1. Change the structure of the economy in a well defined direction.
2. Get Turkey out of the bottle-neck it was in.

Structural changes required a number of long-term measures, while to get out of the bottle-neck required short-term measures and concessions.

The list of concessions was prepared by the IMF and included the following:

- A devaluation at an appropriate rate.
- Control of the money supply.
- A less ambitious investment target and a smaller budget.
- An upward revision of the prices of SEEs.

- Limitation of current spending and wages and salaries to be kept within limits.
- Rationality was to be the basis of agricultural support price policies.

Starting from March 1st, 1978, the following measures were taken:

- The 1978 budget was kept within austerity limits.
- There were no new investments in the 1978 Annual Programme. A low rate of growth was accepted.
- The Turkish lira was devalued.
- Tax deductions on exports were decreased.
- Prices of some SEE products were increased.
- The import programme was determined at levels below the 1977 actual level.
- Rates of interest were changed.
- Limitations were brought to the use of Convertible Turkish Lira Deposits.
- Limitations were brought to the importation of credit.
- Limitations were brought to the private sector's activity in the trade of iron, steel, and the exploitation of mines.

3.4.1 Phase I (February-March 1978)

This phase of the package concentrated on eliminating the guarantee provided by the Central Bank against changes in the exchange rate for convertible lira deposits (a type of short-term foreign currency credit widely used by private en-

terprises in Turkey to finance imports). This brought to an end the short-term foreign borrowing; created stiffer controls on imports with waiver, and encouraged Turkish workers abroad to channel their savings into the Turkish economy.

Imports through the "acceptance credit" system (i.e., using convertible lira deposits) were hard hit. The list of goods that could be imported with such credit was narrowed down and several items such as marine vessels built in foreign dockyards were left out of the list. Imports of steel and petrochemicals through the "acceptance credit" were to be handled entirely by the public sector.

At the end of phase I of the package, the 1978 fiscal budget was kept tight to try reduce the fiscal deficit, and measures were taken to increase budget revenues through a series of tax measures and to keep state expenditure as low as possible. Then came the introduction of the 1978 investment programme which aimed at a modest growth rate of 6.1% in 1978 and at increasing exports and decreasing imports.

3.4.2 1978 Devaluation of the Turkish Lira

On the 1st of March, 1978, the government announced a 23% devaluation in the Turkish lira against the US dollar, 25% against the German Mark, 27% against the Swiss Franc, and 24% against the Pound Sterling. This was Turkey's biggest devaluation since 1970 when the lira was devalued by 66% against the Dollar. It complemented a 10% devaluation in September 1977 that was widely considered inadequate in banking and business circles. A day after the devaluation, the Ministry of Finance made a thorough reshuffle of all tax rebates for exports. The idea appeared to be to ease the treasury burden, since with the devaluation,

major export commodities would become more competitive in world markets.

3.4.3 Phase II (September 1978)

This phase contained a rearrangement of the money and credit system. The aim was to promote savings, curb money supply growth, and reduce consumer spending. As a result, interest rates on bank deposits increased.

Interest rates on savings' deposits were raised and bank credits were made more costly. Banks increased their prime lending rates to 16% from 14% which meant that the final cost to the borrower would be around 25%, taking into account bank charges. The Central Bank also created a new fund, "Interest Difference Rebate Fund", which was used to help finance credits for selected investment projects. Also, the general rediscount rate was raised by the Central Bank from 9% to 10%.

3.4.4 Phase III (March 1979)

This phase included six major targets which were announced on March 21, 1979 under the name of "Economic Rescue Programme", these targets were as follows:

1. To ease the critical foreign currency situation.
2. To reduce the inflation rate.
3. To increase the use of productive capacity.
4. To discourage consumption and channel savings to priority areas.
5. To concentrate new investments in certain key areas and give priority to in-

complete investments.

6. To achieve a just balance in income distribution and to take measures to ease unemployment.

The main policy measures were declared as follows:

1. Public spending will be cut down to slow down the increase in prices.
2. Local administrations will increase their services to help cut down the increase in prices. In addition to that, public transport will be subsidised.
3. Regulatory sales of basic goods by municipalities will be recognised so as not to adversely affect private shopkeepers.
4. Stepping up production, mainly in power and irrigation.
5. The technological and productive potential of the armed forces will be fully utilised.
6. The shift back to coal from fuel-oil will be accelerated.
7. Private transport will be temporarily restricted to save fuel.
8. Measures to decrease unemployment will be taken and labour-intensive projects will be extended.
9. Consumption of luxury goods will be restricted and producers of such goods will be encouraged to export.
10. Firms will be encouraged to increase sales.

11. The production and export targets of several key SEEs were rearranged and increased through the revision of the 1979 investment programme.

3.4.4.1 Exchange Rate Measures

On April 10, 1979 the government moved to eliminate the wide cross-rate differences created in the foreign exchange rates of the lira.

The parity of the lira against the US dollar was readjusted in view of the steady rise in the value of the dollar in international markets. The new parity was set at TL 26.50 instead of TL 25.00. Other exchange rates remained the same, the lira was revalued against the Swiss Franc from TL 16.67 to TL 15.50.

A second move, apparently designed to attract more hard currency into Turkey involved a 40% premium for all workers' remittances and hard currency exchanged by incoming travellers at state supervised exchange offices. Although this was described as "preferential treatment" it was tentatively an introduction to a multiple exchange rate system.

3.4.4.2 Bank Interest Rates

All interest rates on deposits and credits whatever these credits were, short, medium or long-term, were increased, but interests on credits received by the public sector and co-operatives were unchanged. In addition to that, higher interest rates were applied to saving accounts opened by migrant workers. The interest on deposits with a term between one and three years would have 10 points added to the normal interest rate, and savings with a term longer than three years, would get 15 points. Furthermore, all rediscount rates applied by the Central

Bank were raised by 1-4%. Moreover, investors that received credit to realise the export-oriented investment would get the interest they paid back from the "Interest Difference Rebate Fund". This was one of the measures to encourage export-oriented industries.

3.5 The Stand-by Agreement with the IMF in 1979

In July 1979, the Executive Board of the IMF approved the release of US\$ 325 million worth of credits to Turkey through a stand-by agreement after long negotiations from late 1977 with the Demirel and Ecevit governments. Also, in 1979 Turkey negotiated with the OECD and obtained aid pledges which made her able to use US\$ 600 to US\$ 700 million of the total assistance pledged by the OECD and the Western banks. The remaining part totalling almost the same amount would be released in 1980. Furthermore, a US\$ 60 million programme credit was pledged by the World Bank. Thus, Turkey had the option of receiving about one billion US dollars worth of loans until the end of 1979.

Despite domestic and international efforts, 1979 was another difficult year for the economy; production stagnated, unemployment increased, inflation accelerated, the balance of payments position remained tight, export performance was poor, severe import rationing continued, and the external debt position remained precarious. Policy initiatives taken until then proved inadequate to reverse the tide as political and economic uncertainties continued to erode the impact of those measures.

Compared to a growth of 3% in 1978, GDP stagnated in 1979. The value-added in agriculture increased by 3.1% and in services by about 0.3%, but declined in

industry by about 5.6% due to worsening shortages of imported raw materials and energy; especially oil. This stagnation was accompanied by an unprecedented inflation of about 65% in 1979.

The overall public sector deficit increased from about TL 169 billion in 1979 to TL 465 billion in 1980. One third of the deficit was financed by borrowing from the Central Bank. The consolidated budget and the operations of the SEEs were almost equally responsible for the enlarged deficit (OECD, March 1981, 1990/1991).

On the external account, exports fell to US\$ 2.3 billion which meant a decline by about 17%. Imports rose in value by about 10% to US\$ 5.1 billion but only due to substantial increase in prices for the actual volume had decreased by 19%. The current account deficit in 1979 was roughly the same as in 1978, i.e., around US\$ 1.4 billion.

Also, throughout 1979, Turkey made a major effort to alleviate the critical burden of its external debt through:

1. Slowing of short-term liabilities.
2. Debt relief arrangements.
3. Efforts to pursue new sources of credits; especially medium and long-term credits.

The first debt relief operation, arranged by the OECD consortium for Turkey in May 1978 involved consolidating US\$ 1.14 billion in arrears on guaranteed short-term and bilateral medium and long-term debts, as well as amounts due over the thirteen month period May 21, 1978 to June 30, 1979. A second major rescheduling

took place in July 1979 involving payments of about US\$ 1.02 billion on official bilateral and private guaranteed credits due between July 1, 1979 and June 30, 1980. A third major arrangement was finalised in July and August 1979 when commercial banks rescheduled convertible lira deposits (US\$ 2.3 billion), bankers' credits (US\$ 429 million), and third party reimbursement credits (US\$ 300 million). About US\$ 317 million in oil debt was also rolled over. The total amount thus rescheduled was about US\$ 5.5 billion. Despite this, net arrears of about US\$ 500 million emerged given the remaining high debt service burden in 1979.

3.6 Reasons for the Failure of the Austerity Packages

The stability measures taken since August 1977 seem to be slow, hesitant, late, ineffective, and deprived of complementary measures. In many instances, the measures failed because the prerequisites were not provided at the right time.

The lack of enough foreign exchange reserves before a devaluation is announced seems to be the main bottle-neck which did not allow an effective outflow and inflow of foreign exchange to take place. This bottle-neck induced the reappearance of the black market even in cases where the after devaluation rate of exchange was far higher than the last rate at the black market before devaluation (TUSIAD, 1980).

On the other hand, the expected inflation became so deeply rooted in such a way that immediately following the devaluation prices increased nearly as much as the rate of devaluation if not more. The low level of capacity use, the time lags involved in importing necessary inputs, and the eagerness of consumers to buy, have all contributed to the rise in prices.

The rate of devaluations of currency was soon exceeded by rising prices due to a large extent to the fact that the depreciation of the currency was not supported by additional immediate measures to curb spending such as reducing subsidies.

However, the basic reason for the failure of the stability measures is that the policies were half-heartedly adopted just to please the IMF. In particular, the exchange rate arrangements did not preserve the competitiveness of Turkish goods and services partly because the rates of devaluations were often below the required rate and partly because no further adjustments were made in order to keep the rate of foreign exchange at a realistic level.

3.7 The Political Background of the 1980 Adjustment Programme

In the 1970s, sound economic management fell victim to the political expediency of the Republicans People's party under the leadership of Bulent Ecevit and the Democrat party. That policy led to anarchy and economic stagnation in the late 1970s where more than ten people were killed every day and the GNP registered a negative growth in 1979 partly as a result of the continuous strikes by labour unions. In that atmosphere, Ozal presented an economic package to his colleagues and the nation as measures of last resort. First, in his November 1979 memorandum to the Prime Minister, Ozal as Planning Underscretary, argued that the radical measures were unavoidable since another year of indecision could only lead to a collapse of the Turkish state. Given the prevailing crisis atmosphere, he feared that, at the hands of an unforgiving electorate, an indecisive Justice party would suffer the same fate as its predecessor Ecevit's Republicans People's party (RPP).

Although, the new economic measures were adopted in January 24, 1980, the state of anarchy that remained prevailing in Turkey led to a military coup on September 12, 1980 (Barkey, H., 1990). The structural adjustment reforms were politically risky as they meant less state intervention. Hence, the government was jeopardising its chances in being elected again and even of being overthrown as the electorate base was composed mainly of workers in urban areas and farmers in the rural areas who benefited substantially from the state support (Richards, A. and Waterbury, J., 1990). In that respect, the 1980 coup was important for the liberalisation measures in two ways. First, it rescued the new economic package since Ozal discussed these measures with the higher echelons of the Armed Forces before the coup took place. By doing that, he managed to get their approval since any economic success would improve their ability to import weapons and strengthen their position in the country. Second, the coup paved the way for restructuring the state's political foundations by eliminating those opposed to the liberalisation package which allowed taking difficult decisions, such as the tax reform, without any major opposition.

The coup and the resulting 1982 constitution introduced new restrictions on labour unions requiring them to abstain from any political activity and prohibiting them from supporting or receiving support from any political party. In addition, the leftist Revolutionary Workers' Union Confederation (DISK) was dissolved. Furthermore, university faculties, student organisations, and labour unions were purged of radical leadership, politicians were arrested, and political parties were dissolved. These measures, which were the cornerstone for the political success of the 1980 structural adjustment programme, curbed the ability to oppose the new

reforms by those who were disadvantaged as real wages were reduced substantially due to the devaluation in the Turkish lira. If these measures were not taken, it would have been possible for those groups to oppose the reforms by resorting to violence and probably postpone the liberalisation measures indefinitely. Externally, the industrial countries backed Ozal by offering credits and foreign exchange in order to bolster Turkey's position in the wake of the Iranian revolution (Barkey, H., 1990).

In 1982, after the banks' crash, the military government reacted by firing Ozal and replacing him with a team much less committed to economic reform. The new team relaxed the monetary and fiscal constraints paving the way for inflation to accelerate. In 1983 elections were held in Turkey and the armed forces returned to their barracks. After the elections, Ozal and his Motherland party (ANAP) returned with a majority in the parliament (Krueger, A. and Aktan, O., 1992). However, it was implicitly clear that the then President Kenan Evren, who was a General, and his officers stood behind Ozal's economic policies. In addition, prior to the 1987 elections, Ozal pumped over a billion dollars into the countryside through increases in agricultural prices. This helped the Motherland party win the elections and ensured the continuity of economic liberalisation (Nelson, J. et. al., 1989).

The commitment of the different parties to economic liberalisation and the fact that Ozal who designed and implemented them was in power since 1980 (except for the period between the banks' crash and the 1983 elections), was important for that programme to succeed, without any policy distortions. Finally, Turkey had the likelihood of sustaining a multi-party regime within an export-led growth

economy. But all this was contingent on the ability of the economy to continue to export and grow. An economic crisis could have led, or may lead if it occurs in the future, to a renewal of violence and probably the re-entry of the military with all the uncertainties surrounding that situation (Richards, A., and Waterbury, J., 1990). In this view, it is important that Turkey takes its economic problems, such as the high inflation, large public deficit, and foreign debts seriously.

3.8 Main Ingredients of the 1980 Stabilisation Programme

On the 25th of January, 1980 Turkey initiated a stabilisation package aiming at qualitative changes in the functioning of the economy. A systematic classification of the policy mix of the stabilisation programmes included the following (TUSIAD, 1980):

I- Measures to increase foreign exchange earnings:

- Devaluation.
- Reduction of stamp duties on imports.
- Abolition of import duties on imported inputs of export products.
- Establishment of a Price Stabilisation and Support Fund.
- Encouragement of prefinancing exports.
- Automatic adjustment of cross rate differentials.
- Additional promotion measures to exporters and industrialists.
- New rules for the purchase of offices and residential housing by Turkish workers

abroad against foreign exchange.

II- Measures concerning price determination:

- Abolition of the Price Control Committee.
- Autonomy of State Economic Enterprises (SEEs) in price fixing.
- Elimination of subsidies on certain commodities and the decrease of the rate of subsidisation on other commodities.
- Exemption of the import of newsprint from import taxes.
- Substantial price increases for every key commodity produced by the SEEs.
- Price hikes for petroleum products.

III- Measures related to income distribution:

- Indexation of wages.
- Revision of tax rates and tax immunities.

In addition to the above mentioned measures, there were other measures concerning foreign firms, foreign capital, administration, and legislation.

3.9 Main Features of the 1980 Stabilisation Programme

3.9.1 Devaluation

Under this measure the parity between the lira and the US dollar was reduced from TL 47.10 per US\$ 1 to TL 70. This was the second largest monetary operation of the last decade after the 77.7% devaluation of the Turkish lira undertaken

by the former government on June 1979. Along with devaluation, cross rates were readjusted to eliminate any differentials. In order to reduce the impact of devaluation on the cost of imported inputs and as a measure to liberalise trade, the government also reduced the rate of stamp duty on imports from 20% to 1%.

3.9.2 Interest Rate Policy

The government under this policy added 2 to 5 points to the lending rates of the commercial banks. Interest charged on the medium and long-term credits of commercial banks were raised from 20% to 22% and the rate on short-term credits was raised from 16% to 21%.

3.9.3 Pricing Policies

These policies mainly emphasised the role of market forces in determining prices. This was materialised by granting the SEEs their autonomy with respect to the determination of the market price of their goods and services and adjusting that price whenever costs changed. Only three basic goods were to remain under government control: electricity for the production of ferrochromium and aluminium, coal, and all kinds of fertilisers. In addition, the government would continue to control the prices of services supplied by the State Railways, Turkish Maritime, and Turkish Cargo lines. Some argued that granting autonomy to the SEEs was not enough, these institutions had to be reorganised so as to be profitable, but this seemed to require more work and political courage, since SEEs suffered from overemployment, mismanagement, inefficiency, and lack of incentives for higher productivity (TUSIAD, 1980).

3.9.4 Export Promotion Measures

Under these measures, imports of materials to be used in the production of exports would be exempted from all import taxes and duties. In addition to that, foreign exchange would be allocated to exporters for the import of raw materials used in producing export goods. An Export Promotion Fund was established with the Central Bank to finance the preparations for export and exports credit at preferential rates. The revenues of the Fund would come from the import guarantee deposits where 50% of the import guarantee deposits of the importers with the Central Bank would be transferred to the Fund.

3.9.5 Trade Liberalisation

Before 1980, Turkish trade was characterised by a complicated system of quantitative barriers and import restrictions which intensified by the end of 1970 due to acute foreign exchange scarcity. Under this system, commodities were classified in the Quota list (imports subject to user specific semi-annual quantitative limits), Liberalisation List I (freely imported), or Liberalisation List II (subject to licence), supplemented by less important specialised lists. Only a fraction of imports (less than one sixth of the total value) was exempt from quantitative restrictions. Moreover, importers were further required to place an interest-free advance deposit guarantee with an authorised commercial bank to obtain a six-month import permit. In 1979, deposit requirement rates were set at 20% on the value of imports for industrial use and 40% for commercial purposes. In addition, most imports were subject to tariffs and tariff-like charges (averaging about three quarters of the basic tariff rate) comprised a municipal tax, stamp duty, wharf

charge, and production tax.

In 1980, in conjunction with a substantial depreciation of the lira and the adoption of a flexible exchange rate policy, the authorities engaged in a process to dismantle trade restrictions. As a first step, advance deposit requirement rates were cut to 10-15% for industrial and 20-30% for commercial imports. Import regulations were simplified and commercial banks were allowed to retain a higher proportion of foreign exchange receipts. Exporters were granted tariff exemptions on imported inputs and increased foreign exchange allocations. In January 1981 the Quota List was abolished and a large number of items was transferred from Liberalisation List II (including one third of those previously subject to quotas) to List I. The value of liberalised imports (shifted from List II to List I and from Quota List to the other lists) was equivalent to 18% of the value of restricted imports or 12% of total imports in the preceding year. Deposit requirement rates were lowered further to 10% and 20% for industrial and commercial imports respectively. However, in 1982 and 1983 import liberalisation slowed down considerably. The effect of a negligible reduction in the number of items subject to import licensing was more than offset by delays in the issuance of licences. Deposit requirement rates were reduced to 7.5% and 10% for the respective categories of imports (Kopits, G., 1987, p. 11).

At the beginning of 1984, import liberalisation was resumed. The two principal lists were abolished and three new lists created: the Prohibited List (enumerating explicitly the banned import categories), the List of Imports subject to permission (replacing former List II), and the Fund List (covering luxury goods imported upon payment of a specific levy in addition to tariffs). Commodities not contained

in these new lists were automatically imported freely, provided tariffs had been paid. Roughly 60% of imports previously subject to licensing, or 45% of the total value of imports, was transferred to the Fund List or became freely importable. The reduction in quantitative restrictions was accompanied by cuts in the rates of customs duties and production taxes affecting about one fifth of the total value of imports. The average nominal tariff rate of affected imports is estimated to have dropped from 39% to 23%. During 1985, the Prohibited List was phased out, narrowing down the number of banned commodities from 500 to 3 items (narcotics, weapons, and ammunition), and the number of import items on the Permission List was reduced from 1,000 to 245. In addition to some additional tariff rate cuts, by the end of 1985, deposit requirement rates were reduced to 1% for industrial uses and 3% for commercial uses (Kopits, G. 1987, p. 11). In January 1990, the import guarantee deposits were abrogated and import permissions for a large number of goods were abolished (OECD, 1992). Furthermore, in April 1990, import duties, fees, and surcharges on specific investment goods were either removed or lowered (OECD 1990/91).

3.9.6 Privatisation

The privatisation programme was launched in 1984 with the aim of increasing the efficiency of the companies sold and reducing the public deficit. Already majority stakes in five cement companies, Usas airline catering concern, and Ansan the Coca Cola franchise, had been sold. In addition, minority stakes in a number of private companies had been floated off. These included the power utility Cukurova Electric, and Arcelik the household electrics group and other companies. Moreover, other enterprises are still waiting their proposed sell-off such as

the state airline (Turk Hava Yollari), the refineries corporation (Tupras), the petrochemicals complex (Petkim), and the textiles, leather, and porcelain conglomerate (Sumerbank).

The privatisation process in Turkey was suffering from delay for many reasons such as the immaturity of the stock market. Moreover, some banking sources warned that large scale sell-offs could create serious digestion problems and crowd out the capital needs of the private sector. Another kind of problem was the fear that many companies would be owned by foreigners although according to the terms of the 1987 decree domestic buyers were given the priority over foreign buyers. Finally, the lack of private savings was considered a major obstacle behind the rapid progress of the privatisation process (Financial Times, 1990).

The agency in charge of the privatisation of the SEEs (the Mass Housing and Public Participation Fund, MHPPF) is a large public holding company which was valued at about US\$ 2.1 billion in 1988. The MHPPF finances its operations through earmarked revenues such as the whisky tax. In addition to its infrastructure and housing projects, the fund supports the SEEs managerially and financially to prepare them for privatisation. In some cases, the MHPPF retains the golden share in the privatised company which prompted Waterbury (Nas, T. and Odekon, M., 1992, p. 50) to conclude that the public sector did not diminish after 1980, rather it regrouped.

3.10 The Exchange Rate Policy after 1980

In 1980, the Turkish lira was devalued eight times, the nominal devaluation was 144% for the whole year giving rise to a 30% real devaluation. After May 1981,

the exchange rate was adjusted daily and banks were allowed to set their own rates within a specified band (8%) in either direction around the Central Bank's rate. The band was removed in July 1985 but a 1% band was reintroduced in March 1986 (Kopits, G., 1987). In 1988, banks were permitted to fix their exchange rates within 0.2% - 1% of the buying rate of the Central Bank for transactions less than US\$ 50,000 each but they were free to fix the exchange rate for transactions above that limit (Turkiye Is Bankasi, 1989).

Hence, although banks were obliged to operate within a certain band in their foreign exchange transactions, that did not mean that the parity of the TL was being determined by the Central Bank. On the contrary, the rate was effectively determined by the market. This market, which is dominated mainly by banks, determines the rate according to daily supply and demand for hard currency. The Central Bank intervenes in the market for both economic and political reasons (Turkey Confidential, 1990). An example of economic intervention is the spending of about US\$ 2.5 billion of the Bank's reserves by June 1992 to preserve the value of the lira after an increase in liquidity (Financial Times, 1992). On other occasions, the Central Bank bought foreign exchange to stabilise the lira and increase its reserves of hard currency. In fact, the Central Bank through its governor Rusdu Saracoglu, is committed to protect the convertibility of the lira and stabilise it by keeping the stock of money in circulation roughly in line with its foreign exchange holdings. Political events also have had economic policy implications. The Bank had to intervene during the Gulf crisis of 1990-91 for example in order to stabilise the value of the lira due to capital flight.

3.11 Reform in the Interest Rate Policy

Under this reform, interest ceilings were scrapped entirely in certain cases. The government would no longer intervene in the lending and borrowing rates of commercial banks. This means that banks are now free to negotiate the interest rates on deposits and credits. Hence, the era of cheap investment was over and investors had to incorporate more rationality into their decision-making. Higher interest rates on deposits are expected to induce savings and help the government fight inflation. However, exporters would continue to enjoy subsidised low cost credits and saving deposits by workers abroad would receive a premium of five points above the current rates for exchanging foreign currency.

3.11.1 Banks' Crash in 1982

In 1980, interest rates were deregulated with the aim of increasing savings through providing more adequate market determined return on deposits. In addition to that, the deregulation aimed at better allocation of investment credits and dissolving inefficient financial institutions. But deposit rates, although providing a positive real return, remained to be fixed by a "gentlemen's agreement" between the Turkish banks which put a ceiling on nominal interest rates in order to put a limit on the rise in interest rate level and avoid chaos in the market.

In 1981-82, however, competition intensified from the side of unregulated, small, more aggressive savings houses raising their deposit rates, above the limit agreed upon in the agreement, to attract more savings. Moreover, as inflation rates were falling real interest rates paid by those small banks became higher than those paid by large banks. Hence, the finance ministry ordered small savings houses

to cease trading and raised the required reserve ratio prompting savers to shift their savings from small banks to larger ones notably those owned or backed by the state. However, although the government tried to prevent the panic in June 1982 by guaranteeing payment of interest and principal on deposit certificates and bonds and allowed banks in temporary trouble to call on emergency funding from the Central Bank, these measures did not prevent the collapse of a number of small banks and the bankruptcy of the multimillionaire firm "Banker Kastelli", in addition to the losses incurred by savers. As a result, the government started once again to re-regulate deposit interest rates and many banks were taken over by the state.

The flood of savings to large banks was a mixed blessing because they had to pay high real interest rates at a time of recession when it was difficult to find enough first class borrowers; hence, profit declined and the proportion of doubtful loans increased.

In addition to the aggressive competition from small banks, there were other reasons for the failure of interest rates deregulation in Turkey. First, the banking system was characterised by an outdated organisational structure. Second, the majority of Turkish banks had an over-extended branch network and lacked modern business organisation, entailing high overhead costs. Third, was the low capitalisation of Turkish banks, but the government issued decrees to increase their capital, which made banks more vulnerable in a crisis. Fourth, were the traditional links with either the state or large private business which strongly influenced the composition of their own portfolio (OECD, April 1983, p. 39). Finally, there was the lack of supervision over banks which did not prevent many of them from

over-exposing themselves to risk.

3.12 Foreign Exchange Controls

Early in 1982, the military set up a Capital Markets Board. This issues regulations for institutions marketing bonds and other financial instruments.

The first major steps towards lifting foreign exchange controls in Turkey were taken in 1984. Residents and non-residents were allowed to possess foreign currency and to open foreign exchange deposit accounts. Turkish tourists were allowed to take up to US\$ 1,000 per person for each journey and restrictions on importing Turkish lira, notes, securities, bills, and other commercial paper were abolished. Commercial banks and exporters were allowed to retain 75% and 20% of foreign currency earnings respectively (in 1990, the banks' reserve requirement was reduced from 25% to 6.5%). Turkish residents were allowed to export capital up to US\$ 2 million with the permission of the Under-Secretary for the Treasury and Foreign Trade or the Council of Ministers for investments exceeding that amount (OECD, 1984).

In December 1985, the Istanbul stock market was opened which was an important step towards increasing financial deepening and expanding capital markets in Turkey. Companies were encouraged to float shares to the public by reducing the corporate and dividend tax paid by those firms, this gave a boost to the stock market (Economist Intelligence Unit, 1989-90).

After the limited liberalisation of foreign exchange controls in 1984, the government was sometimes obliged to tighten its measures due to changing economic

conditions. There was the need to maintain the delicate balance between interest rates and the exchange rate. However, in August 1989, a major development occurred with respect to the increasing liberalisation of the foreign exchange regulations with the publication of decree no. 32. The decree was concerned with the protection of the value of the lira and a new regime for foreign exchange transactions which were liberalised further. The major measure in the decree was that Turkish nationals were allowed to purchase foreign securities abroad and foreigners were allowed to buy Turkish securities on the Istanbul Stock Exchange (ISE). This implies the free movement of capital with its implications on the foreign exchange. By 1991, several amendments to decree no. 32 took place. The measures in their final form stated that residents in Turkey may transfer abroad any amount of foreign currency and open deposit accounts in foreign currency and use them freely. Non-residents may trade in Turkish securities quoted on the Istanbul Stock Exchange and in securities issued by Turkish public agencies. Foreigners were permitted to open TL deposit accounts and freely transfer interest earnings. Also, residents were allowed to borrow abroad and Turkish banks were allowed to extend credits in foreign exchange with a minimum maturity of 3 years to Turkish foreign trade companies or Turkish residents who are eligible for this kind of credit. In addition, decree no. 32 and its amendments included other measures such as the free import and export of gold (Turkiye Is Bankasi, 1992 and Turkey Confidential, 1990).

The free movement of capital in and out of Turkey is an important factor in increasing the confidence in the country's economic policy. Furthermore, the lifting of the foreign exchange controls may affect: (1) capital flows into Turkey;

(2) interest rates; and (3) exchange rate.

As to capital flows, a comparison between 1988 (before decree no. 32) and 1990 (1991 was not used because it was exceptional due to the Gulf crisis) shows that the net capital flow which included direct investment, portfolio investment, and other capital for 1988 was US\$ - 958 million. This figure turned positive in 1990 reaching US\$ 4,037 million. On the other hand, workers' remittances increased from US\$ 1,827 million in 1988 to US\$ 3,349 million in 1990 despite the recession in the industrial world. In that respect, one can conclude that the lifting of the foreign exchange controls had a considerable positive impact on the inflow of capital and the Turkish economy as a whole.

The impact of the liberalisation of the capital market on interest rates is important in terms of aligning domestic interest rates with international rates. This would prevent any outflow of capital from Turkey which is what happened in the late 1980s when, contrary to expectations, capital was attracted as reflected in the figures above. In that respect, it is important that interest rates remain to be freely determined by the market.

Finally, the free movement of capital may have an effect on the exchange rate through the depreciation or appreciation in the value of the Turkish lira depending on whether there is a negative or positive net capital inflow to Turkey. In that respect, the policy of the Central Bank is pivotal in terms of absorbing the surplus (in case the supply of capital is greater than demand) or depleting its reserves (in case demand is greater than supply) if the Bank is committed to a stable exchange rate policy. In the late 1980s, the Turkish lira was on an appreciating trend in real terms because inflation in Turkey was higher than the nominal depreciation in the

lira in addition to the surplus in the capital flow. This prompted many exporters to demand a rapid devaluation warning that markets will be lost and that it will be difficult to recover them. This led to the intervention of the Central Bank through buying hard currency from the market thus increasing its reserves and putting downward pressure on the lira (Turkey Confidential, 1990). However, in 1991, the trend was reversed due to the Gulf crisis, obliging the Bank to intervene and depleting its reserves as a result of the capital flight.

3.13 Goals of the 1980 Adjustment Programme

The stated goal of the programme of “bringing about a major re-orientation of the economy” calls for:

1. Greater reliance on market mechanisms by both the public and private sectors.
2. Reduction in the rate of inflation.
3. Improved management of the balance of payments and external debts.
4. Policies to encourage the efficiency and international competitiveness of the public and private sectors.
5. The implementation of rational exchange rate policies and measures to encourage exports.
6. Domestic resource mobilisation efforts to be substantially augmented through increased tax efforts, realistic SEE pricing, increased private savings via the banking system, and the development of financial markets.
7. An investment policy aimed at fuller utilisation of existing productive capacity

and completion of ongoing projects requiring modest inputs and tailored to scarce resources.

8. Conditions necessary to stimulate foreign investments in oil, industry, and agriculture.

Following the announcement of this programme, the IMF approved a modification to the terms of the July 1979 stand-by arrangement and the release of larger second and third tranches on February 21 and March 24, 1980. In addition, SDR 71.6 million (US\$ 93 million) in compensatory financing for export shortfalls was provided on February 21, 1980, together with the modification of the stand-by arrangement. In all, this resulted in the provision of US\$ 301 million (SDR 231.6 million), with the remaining US\$ 26 million (SDR 20 million) to be provided in June. However, on June 18th, this stand-by was cancelled. The IMF board approved a new three-year stand-by arrangement involving SDR 1.25 billion (US\$ 1.63 billion), with SDR 460 million (US\$ 600 million) in the first year, SDR 400 million (US\$ 522 million) in the second year and SDR 390 million (US\$ 509 million) in the third year. The key conditions of the new stand-by were:

1. Exchange rate policy was to be kept more flexible.
2. The financial position of the public sector to be improved, mainly as a result of the restructuring of the operational policies of the SEEs.
3. Monetary conditions to be kept extremely tight, as a result of the observance of limits on Central Bank lending.
4. Interest rates to be adjusted to reflect market conditions.

Following the announcement of the programme, aid and debt relief operations started. In meetings under the auspices of the OECD in March and April, US\$ 1.16 billion of bilateral aid was pledged. The World Bank also supported the OECD's and the IMF's efforts through a US\$ 200 million structural adjustment loan in March 1980. Furthermore, about US\$ 2.5 billion in service payments to OECD countries on public and publicly-guaranteed debt, falling due prior to June 1983 were rescheduled, again under the OECD auspices in July 1980.

The Fund's three-year stand-by arrangement was followed by two one-year arrangements in 1983 and 1984 both at the amount of SDR 225 million. The World Bank, on the other hand, provided US\$ 1,600 million through five structural adjustment loans during 1980-85 in support of structural reforms ranging from rationalisation of industrial production to public finance and from external debt management system to financial sector restructuring.¹

3.14 Impact of the 1980 Adjustment Programme on the Turkish Economy

3.14.1 Economic Growth

During 1980-1985, the period when the structural adjustment programme was implemented, the Turkish GNP managed to restore its positive growth trend after two years of negative growth in 1979 and 1980. Table 3.1 shows that GNP was growing at a negative rate of 0.4% and 1.1% in 1979 and 1980 respectively. This negative growth can be attributed mainly to the decrease in demand resulting from the cut in public spending and the restrictions on imports which adversely

¹ All figures and details of the Turkish adjustment programmes are obtained from, TUSIAD, "The Turkish Economy", Istanbul, 1980.

affected the industrial sectors that depend on such imports in their production. The economy achieved better growth in 1981 reaching 4.1% which could mainly be attributed to the effects of the 1980 adjustment programme.

Table 3.1: Percentage of GNP Growth by Main Economic Sectors (producers' value at 1968 prices)

	1979	1980	1983	1984	1985	1986	1987	1988	1989	1990*	1991*
Agriculture	2.8	1.7	-0.1	3.5	2.4	7.9	2.1	8	- 11.1	7.1	- 1.5
Industry	-4.7	- 2.9	6.4	8.8	6.3	8.7	10	3.1	3	8.7	2.6
Services	0.4	0.1	3.6	5.6	4	6.4	6.7	4.1	3.9	9.4	0.8
GNP	-0.4	- 1.1	3.3	5.9	5.1	8.1	7.4	3.7	1.7	9.7	0.3

Sources: TUSIAD and Briefing.

(*) At 1987 constant prices.

It is also clear that the programme was oriented towards reviving Turkish industry, which had also been growing negatively in 1979 (-4.7%) and 1980 (-2.9%), to increase the production of exports through devaluation which makes them more competitive abroad, in addition to increasing the production of import substitutes to reduce the demand on imports; hence, increase foreign exchange revenues and reduce the imports bill. Table 3.2 shows that the share of agriculture in GNP declined substantially from 21.1% in 1981 to 17.5% in 1990. On the other hand, the share of industry increased from 20.4% in 1981 to 23.2% in 1990 while the services sector increased its share from 58.5% in 1981 to 59.3% in 1990. The declining share of agriculture in GNP may not be necessarily due to a decline in production for agricultural production was increasing throughout the 1980s but the growth in agriculture was much slower than the growth in the other two sectors.

Table 3.2: GNP Shares of the Main Economic Sectors (producers' values at constant 1968 prices)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture	21.1	21.5	20.7	20.3	19.8	19.7	18.8	19.5	17.1	17.5
Industry	20.4	20.5	21.4	22.3	22.5	22.6	23.1	23	23.2	23.2
Services	58.5	58	57.9	57.4	57.7	57.7	58.1	57.5	59.7	59.3
GNP	100	100	100	100	100	100	100	100	100	100

Sources: OECD, 1992.

On the whole, one can say that the programme achieved its target of economic growth, in general, but this growth was not homogeneous in the whole economy; because it occurred mainly in the industry and services sectors while the share of agriculture declined substantially.

3.14.2 Exchange Rate and the Balance of Payments

According to the Economic Report of 1989 published by the Istanbul Chamber of Commerce (ICC), tax refunds and high foreign exchange rates, the two most important monetary tools used by the 1980 adjustment programme to promote exports were forgone. Hence, it is now being claimed that because of this the export target of US\$ 12,485 million set for 1989 was not achieved and exports were less than in 1988. The report also refers to a survey conducted by the Central Bank and the Under Secretariat for the Treasury and Foreign Trade which concludes that tax refunds do not play an important role in increasing exports, for the average contribution they make to total exports is 5.6%. However, it is worth mentioning that a new incentives system was put into practice at the beginning of 1989. The principle elements of the new system are, according to the Economic

Report, providing performance credit and pre-shipment export credit by Exim bank, premium payments from the Support and Price Stability Fund, subsidised shipping charges, VAT refunds, low-cost energy, corporate income tax exclusion, and duty-free importation under an export incentives certificate.

However, Turkish trade still faces some problems such as the need to diversify export markets where 65% of Turkey's exports are concentrated in ten countries. In addition, there is the need to establish and develop subsectors to improve the quality of produced goods and their packing so that Turkish products can compete in the international market (Istanbul Chamber of Commerce, 1989).

On the other hand, the main problem facing the researcher into Turkish trade before 1980 is the size of the black market. It is believed that Turkey until 1980, like any other state-controlled economy, had a large black market in trade and the foreign exchange market which makes any study relying on official data in those two fields inaccurate. The inability to determine the size of the black market makes it very difficult for any comparative study to assess the real impact of trade and exchange rate liberalisation after 1980.

Early in 1975, the differential between the free market exchange rate and the official rate was less than 10%. By the end of 1977, however, the free market exchange rate was 36% higher and rose to 51.6% in 1978. It rose even further early in 1979 reaching a 91.4% differential in March of that year, when the official rate was still TL 25 per US dollar while the free market rate was TL 47.85. That differential was eliminated with the June 1979 devaluation of the Turkish lira to TL 47.1 per US dollar. It nonetheless started rising again, reaching 15% by the end of 1979. In January 1980, the official rate was changed again to TL 70 per US

dollar. Thereafter, the official rate was altered frequently and disparities between the free (black) market and the official rate of the magnitude that had been in the 1970s were not repeated (Krueger, A. and Aktan, O., 1992).

A related consequence of the overvaluation in the Turkish lira in the 1970s was the incentive for under-invoicing of exports and over-invoicing of imports, for smuggling, and for Turkish workers to refrain from repatriating their savings through official channels unless there were special incentives. Hence, Krueger and Aktan (1992) believe that the recorded reduction in imports between 1977 and 1978 of more than 20% and the sudden rise in exports in 1981-1985 may overestimate the real economic activity that was going on in Turkey and that there probably was a good deal of smuggling before 1980.

In addition, Krueger and Aktan (1992) showed that there was over-invoicing of exports in Turkey (in order to benefit from export incentives) that went on until 1985 and subsided after that due to the public outcry and the subsequent reduction in export incentives after that. As a result, faked invoicing diminished substantially though perhaps has not totally disappeared. Over-invoicing was clear from the trading partners and Turkey's figures in the individual category statistics for exports. However, Krueger and Aktan (1992) admit that it is not possible to estimate the extent to which disparities arise because of over-invoicing in Turkey or because of other statistical problems. On the whole, although over-invoicing reached a maximum of 21% of total exports in 1984, this would not make Turkish exports performance during the 1980s much less impressive; especially when we measure that exports growth against a worldwide recession.

Table 3.3 shows that since the implementation of the 1980 stabilisation pro-

Table 3.3: Turkish Current Account (US\$ million)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Exports	2,261	2,910	4,703	5,890	5,905	7,389	8,255	7,583	10,322	11,846	11,771	13,026	13,672
(*) % annual change in exports	-	28.7	61.6	25.2	0.25	25.1	11.7	-8.1	36.1	14.8	-0.6	10.7	5
Imports	-4,815	-7,513	-8,567	-8,518	-8,895	-10,331	-11,230	-10,664	-13,551	-13,646	-15,972	-22,581	-20,998
(*) % annual change in imports	-	56	14	-0.57	4.4	16.1	8.7	-5	27	0.7	17	41.4	-7
(*) % change of exports/imports	46.9	38.7	54.9	69.1	66.4	71.5	73.5	71.1	76.2	86.8	73.7	57.7	65.1
Trade balance	-2,554	-4,603	-3,864	-2,628	-2,990	-2,942	-2,975	-3,081	-3,229	-1,800	-4,201	-9,555	-7,326
Services: credit	707	761	1,316	2,038	2,041	2,366	3,132	3,250	4,111	5,945	7,083	8,933	9,315
Services: debit	-1,376	-1,738	-1,943	-2,639	-2,734	-2,945	-3,185	-3,646	-4,282	-4,812	-5,474	-6,496	-6,816
Private unrequited transfers	1,799	2,153	2,559	2,189	1,549	1,885	1,762	1,703	2,070	1,806	3,135	3,349	2,854
Official unrequited transfers	11	18	16	105	236	229	236	246	351	361	423	1,144	2,245
Current account	-1,413	-3,409	-1,916	-935	-1,898	-1,407	-1,030	-1,528	-979	1,500	966	-2,625	272

Source: IFS except (*).

gramme, with the liberalisation of trade and free market determination of the exchange rate, Turkish exports rose at a higher rate than imports where in 1981 exports rose by 61.6% compared to 1980 and from 1980 to 1985 exports jumped from US\$ 2.9 billion to almost US\$ 8 billion that is about 173%. However, in 1982 and 1983 Turkish trade stagnated due, according to Turkish sources, to the recession in world markets. As to imports, the table shows that they were growing at a lesser rate than exports leading to a descending trend in the trade deficit where Turkey started with a deficit equal to US\$ 4,603 million in 1980 and ended up with a US\$ 1,800 million deficit in 1988, although with some fluctuation during that period. However, in the period 1989 - 1991 the trade deficit increased again to above its average level in the 1980s.

With regard to services, excluding remittances, income from this sector increased substantially from US\$ 761 million in 1980 to US\$ 9,315 million in 1991. This huge increase in services can be attributed to the devaluation in the Turkish lira and the lifting of foreign exchange controls in the late 1980s which encouraged tourism and attracted capital leading to a fast growth in that sector. However, revenues from services were outweighed by expenditure in that sector until 1988 when a surplus occurred in revenues for the first time in the 1980s. This surplus reached about US\$ 2,500 million in 1991.

On the other hand, remittances did not increase as a result of the new measures involving the exchange and interest rates. The amount remitted kept on fluctuating between about US\$ 1,100 million and US\$ 2,500 million during the period from 1978 to 1988. However, after 1988 i.e., after the lifting of foreign exchange controls, remittances shot up to US\$ 3,349 million in 1990 (despite the recession in the

industrial world) but declined in 1991 to US\$ 2,854 million due to the Gulf crisis.

As to the exchange rate against the US dollar, table 3.4 shows that the Turkish lira depreciated substantially from TL 31.08 per US dollar in 1979 to TL 8,181 per US dollar in November 1992. This reflects the increasing pressure on the lira and the determination of the Turkish authorities to eliminate any erosion in the competitiveness of Turkish products abroad due to internal inflation or rises in wages.

Table 3.4: Exchange Rate Changes in the Turkish Lira with respect to the US dollar

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Av. period TL/US\$	31.08	76.04	111.22	162.6	225.5	366.7	522	674.5	857.2	1,422.3
% change in TL value*	-	59.1	31.6	31.5	27.9	38.5	29.7	22.6	21.3	39.7

Table 3.4: continued

	1989	1990	1991	1992
Av. period TL/US\$	2,120	2,608	4,170	8,181 ^a
% change in TL value*	32.9	18.7	37.5	49

Source: IFS and Briefing except (*).

(a) Rate as of November 23, 1992.

3.14.3 Interest Rates, Money Supply, and Savings

Since the implementation of the 1980 adjustment programme and the consequent market determination of interest rates those rates rose sharply making it more costly to launch any economic project and increasing the level of savings. On the other hand, the increase in interest rates led to the dissolution and the

liquidation of many companies at an unprecedented rate due to either inefficiency or the rise in costs (see tables 3.5 and 3.6).

Table 3.5: Interest Rates Changes in Turkey

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Deposit nominal interest rates	7.33	10.95	29.96	45	51.9	54.32	49.2	41.91	35.4
(*) Deposit real interest rates	-51.36	-99.24	-6.64	14.2	20.5	5.92	4.2	7.3	-3.4
Lending nominal interest rates	18	25.67	35.58	36	35.5	52.33	53.5	52.63	50
(*) Lending real interest rates	-40.7	-84.52	-1.02	5.2	4.1	3.9	8.5	18	11.2

Table 3.5: continued

	1988	1989	1990	1991	1992 ^a
Deposit nominal interest rates	72	52	50	70	70
(*) Deposit real interest rates	- 3.4	- 17.6	- 13.2	4	-
Lending interest rates	87.9	85	90	95	95
(*) Lending real interest rates	12.5	15.4	26.4	29	-

Source: IFS and Briefing except (*).

Real interest rate = nominal interest rate - CPI.

(a) As of July 2, 1992.

Table 3.6: Dissolutions and Liquidations of Turkish Companies

	1976	1977	1978	1979	1980	1981	1982	1983	1984
Number of companies	523	846	304	1,057	998	2,051	1,951	1,709	1,680

Source: Union of the Chambers of Commerce, Industry, Maritime Trade and Commodity Exchanges of Turkey, Economic Report 1985, p. 120.

Many conclusions regarding Turkish economic activity in the 1980s can be drawn from table 3.7. First, it is clear that as in 1978, in 1979 credits were more than deposits available; hence, creating inflationary pressures due to the increase in the money supply. However, in the 1980s the situation changed and deposits met the demand on credit after interest rates were allowed to float freely. Second, it seems that savings in Turkey are not related to interest rates, since from 1980 to 1984 interest rates rose sharply while savings did not follow that rise possibly due to the fall in real wages. In general, it can be suggested that the general trend for the average propensity to save over the 1980s remained constant (at about 0.22% of total income, 0.14% in urban areas and 0.33 in rural areas according to the 1990 census of population) and nominal savings were more or less directly related to the expansion in the money supply. It is worth noting that while interest rates on deposits in 1985 and 1986 decreased in nominal terms and increased in real terms, the rate of savings decreased. On the other hand, while interest rates were increasing in real and nominal terms in 1982 and 1983, the rate of increase in savings did not follow the rise in interest rates, on the contrary the rate of savings again decreased. More precisely, in 1982-83, deposit interest rates increased from 45% to 51.9% in nominal terms while the rate of increase in deposits declined from 56.2% in 1982 to 30.8% in 1983. This argument of inverse relationship between interest rates and deposits was true for the whole decade of the 1980s and early 1990s.

As to the relation between banks' credits and interest rates it is astonishing that the nominal rate of increase in credit was at its highest when lending interest rates were at their highest in nominal and real terms in 1985 and 1986, although

during 1979-1984 credits were decreasing as interest rates were rising.

From table 3.7 one can notice easily the directly positive relation between savings and the money supply where interest rates play a minor role in determining the level of savings. Hence, Turkish consumers still have weak response to changes in interest rates despite the increase in real wages (see table 5.7) and Turkish per capita income (constant 1968 prices) from TL 4,310 in 1982 to TL 5,360 in 1990 (Economist Intelligence Unit, 1992-93). Moreover, investors seem to be more rational with respect to interest rates and their use of credits as can be seen from tables 3.7 and 3.5.

As to the money supply, the Turkish government did not follow a strict policy during the last decade. For the money supply expanded at about an annual average of 55.5% during the period from 1980 to 1991 (see table 3.7). This loose policy might be one of the reasons behind the loss of control over inflation and threatens the achievements of the 1980 adjustment programme.

3.14.4 Investment

Investment was positive during the period 1981-1987 and high between 1985-1987 and in 1990 as a result of the economic measures, mainly in pricing and interest rates policies, taken in 1980. This change in the economic environment led to a positive growth in investment in 1981 after three consecutive years of negative growth.

When one examines tables 3.8 and 3.9 it is clear that investment, both public and private, increased sharply between 1980 and 1990, this increase was reflected

Table 3.7: Money Supply (M2) and Banks' Deposits and Credits (TL billion)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Money supply (M2)	510.3	812.9	1,361	2,352	3,056	4,837	7,562	10,722	14,497	23,965	46,392	68,764	111,015
Banks' deposits	432	745	1,509	2,357	3,083	4,981	7,999	11,5348	16,441	25,239	40,235	59,057	95,596
Banks' credits	446	789	1,319	1,806	2,417	3,149	5,568	10,053	16,034	22,771	31,880	54,866	87,044
(a) % change in M2	-	59	67.4	72.8	30	58.3	56.3	41.8	35.2	65.3	93.6	48.2	61.4
(a) % change in deposits	-	72.4	102.5	56.2	30.8	61.5	60.6	44.2	42.5	53.5	59.4	46.8	61.9
(a) % change in credits	-	76.9	67	36.9	33.9	30.3	76.8	80.5	59.5	42	40	72	58.6

Source: The Central Bank of Turkey.
except (a).
(a) Rounded figures.



in the share of investment in GNP which reached 24.8% in 1987 and declined to 22.5% in 1990 starting from a share of 19.5% in 1980.

Table 3.8: Percentage Growth in Fixed Investment

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
% growth in fixed investment	-10	-5	-7	1.7	3.5	3	0.1	16.7	12.3	5.2

Table 3.8: continued

	1988	1989	1990	1991	1992*
% growth in fixed investment	- 1.3	- 1	14.1	- 1	5.2

Source: OECD, 1992.

(*) 1992 programme.

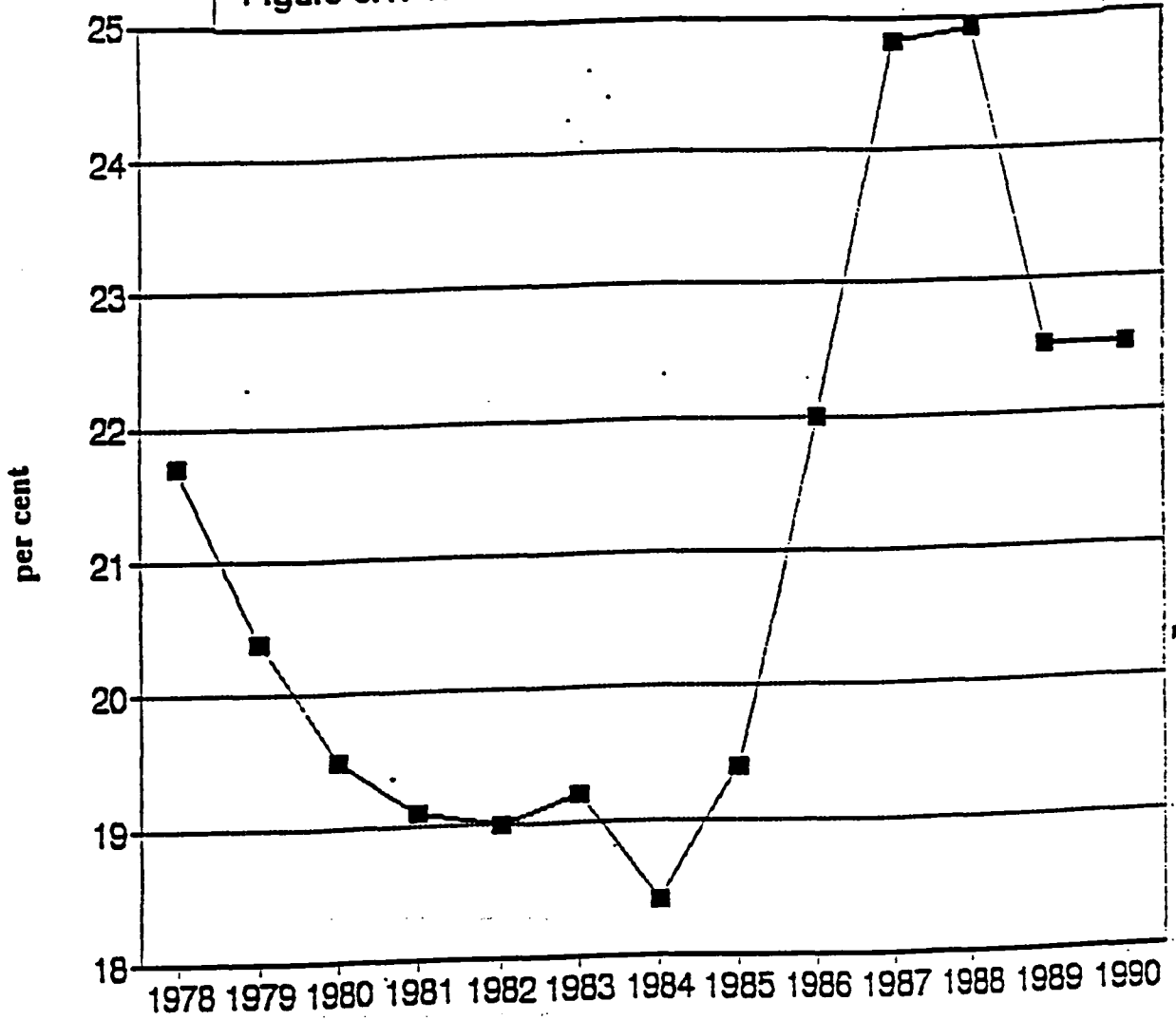
Table 3.9: Fixed capital investment as a percentage of GNP

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
% share	21.7	20.4	19.5	19.1	19	19.2	18.4	19.4	22	24.8	24.9	22.5	22.5

Source: TUSIAD and OECD.

Table 3.9 shows that the ratio of investment/GNP was fluctuating in the early 1980s below its level in 1978-1979. This phenomenon persisted until 1985 when the share of investment in GNP started to rise again until 1989 when it started to decline again. This change in the investment share in GNP can be represented by a J-curve (see figure 3.1) which shows that the liberalisation measures taken in 1980 had a negative impact on investment in the first few years despite the growth in GNP. It is worth mentioning that the main reason for the decline in investment was the substantial slow down of private investment compared with

Figure 3.1: The Share of Investment in GNP in Turkey



the considerable rise in investment in the public sector (see table 3.10).

In general, in the late 1970s and early 1980s, Turkey had unutilised capacity in manufacturing, and it was not until the mid 1980s that all of it was exploited. During that period, investment was sluggish especially as real interest rates were much higher than the industrial sector had been used to before 1980. After 1985, with the success of Turkish manufactured exports and the "full" utilisation of the spare capacity, Turkish investors realised the need for more investment if they wanted to keep their market shares both at home and abroad as demand was increasing and much of the equipment used in production was getting old (most of the capital goods used were purchased in the 1970s). Hence, investment increased until 1989 when interest rates became very high (see table 3.5) making the cost of capital inhibiting for investors (Financial Times, November 18, 1992).

Despite the liberalisation measures taken by Turkey in 1980 and the decentralisation of the economy, table 3.10 suggests that the state still plays an important role in investment. Its share fluctuated around 45%-50% of total investment in 1978-1980 and increased to about 60% during the implementation of the adjustment programme in 1980-1985, to decrease after that to about 43% in 1990. Some Turkish sources (ICC, 1989) attribute this high public share in investment to the nature of public investment which concentrates on infrastructure projects, which are capital-intensive, while private investment concentrates on productive projects.

Table 3.10: Percentages of Public and Private Fixed Capital Investment

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Pu. I. ^a	48.2	49.7	55.8	62.2	61.5	60.9	60	61.3	57.1	53.5	48.3	45.3	43.5
Pr. I. ^b	51.8	50.3	44.2	37.8	38.5	39.1	40	38.7	42.9	46.5	51.7	54.7	56.5

Source: TUSIAD and OECD.

(a) Public investment.

(b) Private investment.

Whatever the case might be, it seems necessary for Turkey to accelerate the process of privatisation, increase credits to the private sector, and introduce incentives to encourage private investment.

3.14.5 Inflation

As a result of the 1980 economic adjustment package, Turkey managed to bring down inflation from 110.2% in 1980 to 36.6% in 1981 and 30.8% in 1982. However, in 1984 inflation got out of control and jumped to 48.4% but then retreated in 1987 to 38.8%. In 1988 onwards, the inflation rate in Turkey started to rise above its average in the previous years and reached 66% in 1991.

Table 3.11: Consumer Price Index (percentage change over previous year)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
CPI	45.3	58.7	110.2	36.6	30.8	31.4	48.4	45	34.6	38.8	75.4	69.6	63.6	66

Source: IFS.

The decrease in inflation at the beginning of an adjustment programme and the continuous increase afterwards may be explained as follows. First, the devaluation of currency and the rise in interest rates increase the investment and input costs.

This increase in costs drives the investors to exploit the unutilised capacity in the production process to reduce costs; hence, with tight monetary and fiscal policies and with decreasing domestic demand due to decreasing domestic real wages, inflation may go down in the short-run. In the long-run, inflation may shoot up once again after "full" utilisation of resources and unutilised capacity, rise in demand due to a rise in wages, the continuing depreciation in the Turkish lira, and the growth in the economy which, in many cases, is accompanied with inflationary pressures.

3.14.6 Foreign Debts

It is difficult to evaluate whether it was for the benefit of Turkey to increase its foreign debts by nearly threefolds to get out of the bottle-neck it was in in 1979. Table 3.12 shows that Turkey started its 1980 adjustment programme with total foreign debts equal to US\$ 13,604 million and in 1991 its total debts reached US\$ 48,661 million. It is true that some aspects of the Turkish economy such as exports and GNP growth improved substantially, but were the costs worth the benefits?

In addition, total debt/GNP ratio rose from 28.3% in 1981 to 50% in 1990. Moreover, the ratio of total debt/exports of goods and services increased from 196.6% in 1981 to 223.3% in 1990 due to the dramatic increase in exports after 1980. The major borrowers in Turkey are the government (more than 53% of total debts in 1992), the private sector (21% of total debts in 1992) and the Central Bank (about 14% of total debts in 1992). Moreover, the major lending sources, financing more than 80% of Turkey's foreign debts are the OECD countries, multilateral organisations (IMF, World Bank, and European Resettlement Fund), and

Table 3.12: Turkey's Foreign Debt (US\$ million)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 ^a
M. & LT. ^b	10,048	12,693	13,408	15,855	16,104	17,479	20,717	25,752	32,605	34,305	36,006	39,535	39,544	37,511
Short-Term	3,556	2,480	2,111	1,764	2,278	3,180	4,759	6,349	7,623	6,417	5,745	9,500	9,117	8,819
Total	13,604	15,173	15,519	17,619	18,385	20,659	25,476	32,101	40,228	40,722	41,751	49,035	48,661	46,330
Debt/GNP (%)	-	-	28.3	32.5	35.6	41	47.5	54.7	59	57.5	56.7	50	-	-
Debt/exports ^c	-	-	196.6	176.7	196.9	177.2	193.2	255.8	243.5	207.6	184.9	223.3	-	-
Debt by borrower														
(%)														
Government	-	-	56	55.6	54.6	53.3	50.4	51.3	52.3	56.8	57.3	52.3	54.3	53.9
SEEs	-	-	11	10.1	8.7	6.9	8.3	9.2	9.2	9.8	9.9	9.7	9.7	10.4
Central Bank	-	-	23	23.2	28.5	27.3	26.4	23.7	23.9	20.6	18.9	16.7	15	14.2
Private Sector	-	-	10	11.1	8.2	12.5	14.9	15.8	14.6	12.8	13.9	21.3	21	21.5

Sources: Briefing, OECD and Central Bank of Turkey.

(a) As of March 1992.

(b) Medium and long-term debts.

(c) Percentage of debts to exports of goods and services.

commercial banks.

3.14.7 Public deficit

Etatism in Turkey relied on the government to carry out major investment projects which led to a heavy financial burden on the government's budget. This was reflected by the public sector borrowing requirement presented in table 3.13 which showed the tremendous increase in the deficit of the central government and its economic arm, the SEEs. The PSBR increased from about TL 169 billion in 1979 to about TL 64,000 billion in 1992. On the other hand, the Turkish government reduced its dependence on the Central Bank and foreign borrowing to finance its deficit and relied more on the domestic financial markets. The Central Bank which used to finance about one third (34.3%) of the public deficit in 1980 was financing 3.8% only of that deficit in 1989. However, this share rose to 20.8% in 1992. Meanwhile, financing the PSBR by borrowing from domestic financial sources increased from 30.2% in 1980 to 86.5% in 1992.

These developments in the public sector borrowing requirement occurred despite the commitment to reduce this deficit through privatisation of the SEEs, reducing subsidies, and raising prices as part of the economic adjustment policies adopted in 1980. The continuing deficit in the public sector shows that this sector is still the centre of gravity in the economy (Nas, T. and Odekon, M., 1992).

An important change in the policy of financing the deficit is clear through the increase in reliance on domestic financial markets to finance the deficit while depending less on foreign borrowing and Central Bank financing. The latter policy reduced the growth in money supply which was the major cause of inflation before

Table 3.13: Public Sector Borrowing Requirement (PSBR)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 ^a	1992 ^b
Public Deficit															
(TL billion)	- 65.7	- 168.8	- 465	- 319	- 374	- 687	- 1,194	- 1,267	- 1,866	- 4,544	- 6,226	- 12,322	- 30,239	- 57,205	- 63,970
Government	- 52.5	- 87.9	- 208	- 127	- 168	- 385	- 773	- 397	- 546	- 2,074	- 3,421	- 7,902	- 15,123	- 37,556	- 39,574
SEEs	- 13.2	- 71	- 257	- 192	- 206	- 302	- 421	- 870	- 1,320	- 2,470	- 2,805	- 4,420	- 11,116	- 19,649	- 24,396
Financing (%)^c															
Central Bank	-	-	34.3	20	12.7	9.8	11.2	27.3	14.1	12.9	15.8	3.7	1.1	28.2	20.8
Foreign borrowing	-	-	35.5	62.8	49.5	21	59.2	15.3	58.1	44.2	43.3	15.3	11.9	- 1.9	- 7.3
Domestic borrowing	-	-	30.2	17.2	37.8	69.2	29.6	57.4	27.8	42.9	40.9	81	87	73.7	86.5

Source: OECD.

(a) Provisional.

(b) 1992 programme.

(c) Sources of financing the PSBR.

(d) In TL million.

1980 (see chapter 4).

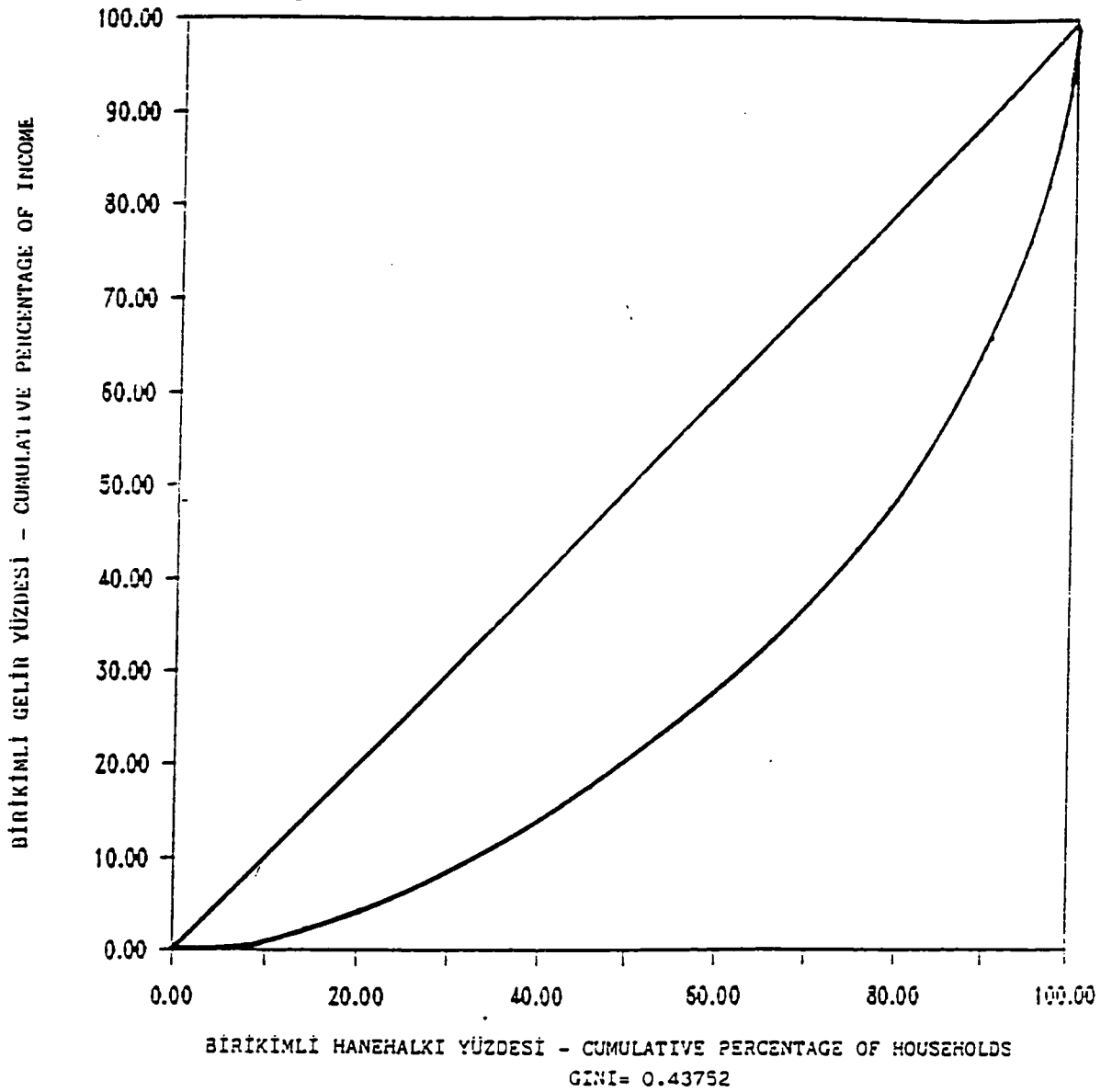
3.15 Income Distribution

The information available on the distribution of income and wealth in Turkey is very limited especially for the period of liberalisation. However, the studies of Hansen (1991), Celasun(1986) and the 1987 Income Distribution Survey by the State Institute of Statistics shed some light on the issue. The first two studies reported a widening in the income distribution gap represented by the Gini coefficient which increased from 0.50 in 1978 to 0.52 in 1983 (Celasun, M., 1986). Moreover, there was a decrease in the wealth of the lowest quintile from 2.8% of total wealth in 1978 to 2.6% in 1983 while there was an increase in the wealth of the highest quintile from 54.7% in 1978 to 55.9% in 1983 (Hansen, B., 1991). However, the 1987 income distribution survey suggests that the trend has been reversed with a decline in the Gini coefficient from 0.52 (according to Celasun) to 0.43 with an even lower coefficient (0.41) for rural areas. The Gini coefficient for the urban areas was 0.44 suggesting a bigger income distribution gap in the cities.

The decline in the Gini coefficient reflects the rise in income of the lowest quintile from 2.6% in 1983 to 5.2% in 1987 i.e., about double the income received by that percentage of the population in 1987 compared to 1983. As to the highest quintile, there was a decline in income from 55.9% of total income in 1983 to 49.9% in 1987.

It is clear from the above figures that the structural adjustment programme had initially aggravated the income distribution problem in Turkey in the first few years. However, the trend changed after the continuous growth in the economy

Figure 3.2: Lorenz Curve for Turkey



Source: State Institute of Statistics, 1990 Census of Population.

in the 1980s at an annual average of about 6%. The narrowing of the income distribution gap, whether represented by the Gini coefficient or the increase in income of the lowest quintile, may also be attributed to the continuing rise in wages in Turkey both in real and nominal terms after 1986. Nominal wages since 1986 have been rising by more than the rate of inflation i.e., a rise in real wages (see table 5.7 and OECD, 1992) thus causing a redistribution of income from profit earners to wage earners. In fact, the data on real wages show that those wages declined until 1986 after which they increased by an annual average of approximately 17% (much higher than the annual average growth in GNP which reached 5.9%) leading to a better Gini coefficient, hence, narrowing the income distribution gap.

3.16 Turkey and the EC

On 31 July 1959, Turkey applied to the European Community (EC) for an agreement of association and thus became the second country to do so, following Greece by a few weeks. The application was motivated by political considerations rather than economic realities. It may be true that if Greece had not applied, it would have taken Turkey much longer to apply. On 12 September 1963, the negotiations between Turkey and the EC ended resulting in the signature of the Ankara agreement which stated the association formula between the two sides. The stated objectives of the association agreement are: (1) the establishment of a customs union; (2) the alignment in three stages of the economic and social policies of the two entities including the free movement of labour; and (3) financial cooperation to speed up the economic development of Turkey (Cendrowicz, M., 1992).

The 1963 agreement specified a number of stages through which Turkey would pass: a preparatory phase, a transitional phase, and a final phase. The first phase was designed to last a minimum of five years and a maximum of ten, the second phase was designed to last a minimum of twelve years and a maximum of twenty two. The final phase would become operative only as a means of moving to full membership in the EC. This time table meant that Turkey could enter its final phase as early as 1980 or as late as 1995.

The preparatory phase was characterised by unilateral aid from the EC to Turkey in terms of preferential tariffs and quotas on Turkey's traditional agricultural exports and a US\$ 175 million loan (first financial protocol) to assist with industrial development projects. The basic aim of this aid and subsequent ones was to strengthen the Turkish economy in terms of its exports and its industrial structure in preparation for the transitional phase. During the transitional phase, it was envisaged that there would be a gradual shift to a customs union, with the principle of reciprocity being established. In particular, this phase was intended to include the acceptance of the common external tariff (CET) system, the gradual acceptance of the common agricultural policy (CAP) and the general relaxation of factor immobilities as outlined in the Treaty of Rome.

The 1963 agreement set up three bodies to coordinate economic and political relationships between the EC and Turkey: (a) the Mixed Parliamentary Committee, (b) the Council of Association; and (c) the Association Committee. It is primarily through the latter two bodies that Turkey has negotiated the different stages of its relationship with the EC.

The preparatory phase could have ended in 1968. However, the negotiations of

the next step revealed fundamental disagreements mainly over the phasing of the industrial tariffs. Eventually, on 23 November 1970, Turkey signed an additional protocol with the EC, laying down the conditions, procedures, and time table for the transitional phase. An interim agreement was established to cover the intervening period, and the protocol became effective in 1973. The transitional phase which was inaugurated by the additional protocol aimed at the establishment of a customs union over a period of twelve to twenty two years starting from 1 January 1973 in addition to economic cooperation. Thus, Turkey ends the transitional phase in 1995 (a maximum period of twenty two years was adhered to) with the setting up of a customs union with the EC. The union would remove customs duties and taxes, and includes the adoption of CETs and the elimination of quantitative restrictions in addition to eliminating any kind of export incentives.

Progress towards achieving the customs union has not been going smoothly. On its side, the EC abolished both customs duties and quantitative restrictions on imports of industrial products according to the schedule laid down in the Additional Protocol. However, the tremendous increase in the Turkish exports of textiles, led the EC to impose quota restrictions on these products from Turkey in 1978. Also, Turkey fell behind schedule for the removal of tariffs and at present reached a 50 per cent reduction (on the twenty two years list), yet a 60 per cent reduction should by now have been reached (Cendrowicz, M., 1992).

According to the Additional Protocol, the right of free movement of labour applies to Turkey from 1976, leading to complete free movement in 1986. However, this principle never materialised due to the unemployment problems in Europe. In addition, financial assistance amounting to US\$ 195 million (second financial

protocol) was granted during 1971-77 followed by about US\$ 250 million (third financial protocol) for 1979-81. In June 1980, the Association Council agreed a fourth financial protocol of about US\$ 500 million. However, negotiations on this protocol came to an abrupt halt in June 1981 and the grant was frozen after the 1980 military coup and Turkey's bad human rights record.

The economic impact of the establishment of the customs union with the EC is expected to be positive. Although Turkish exporters since 1980 have been relying on a generous export incentives scheme which will be abolished by 1996 with the customs union, the negative impact of such a move must be weighed against the increase in exports of textiles and other competitive products which proved successful in penetrating the EC markets. On the other hand, industries such as automobile and electronics are expected to be under substantial pressure.

Studies of the competitiveness of Turkish industry suggest that 75 per cent of Turkish industry would be capable of withstanding international competition, or that 22 per cent of manufacturing industry would risk elimination and that another 35 per cent would need modest adaptations. Among different industries, cotton textiles and clothing, glass, cement, some metal products and consumer and food products industries would have a good chance of meeting European competition. On the other hand, capital intensive industries such as parts of the steel industry and electronics would probably have difficulties without substantial adaptation and increase in capital investment (Hale, W., 1990).

In general, Turkey's exports to the EC are likely to depend very much on its success in improving standardisation, quality control, and on establishing an effective marketing network in Europe. This is necessary, not only to compete

against, but also to capture a larger share of the EC market from member countries such as Greece, Spain, and Portugal and other countries on the Mediterranean. Finally, it may be said that, the obligations assumed towards the Community within the framework of the customs union present no danger of straining Turkey's economy or arresting its industrialisation.

3.16.1 Turkey's Full Membership in the EC

On 14 April 1987, the Turkish Government presented a formal request to the then president of the EC's Council of Ministers for Turkey to become a full member of the EC. As usual, the Council in its turn asked the Commission to provide it with an Opinion on this request. As mentioned above, the motives for joining the EC are mainly political, rather than economic. These include the fact that Greece has full membership, which is interpreted in Ankara as a disadvantage for Turkey in its disputes with her neighbour if Turkey remains outside the EC. Other factors behind the application included the eagerness of Turkey to be acknowledged in the west as a liberal democracy and to be accepted as part of Europe and its culture.

In its Opinion which was sent to the Council on 18 December 1989, the Commission stated the Community is currently engaged in achieving progress towards political, economic, and monetary union. This reason prompted the Commission to believe that it would be unwise with regard to both the Turkey and the EC to start any negotiations regarding accession before 1993 at the earliest. However, this polite rejection of Turkey's application was made clear by Abel Matutes, the Commissioner of the Mediterranean Policy, in a press conference held on 18 December 1990, who confirmed that Turkey was "eligible to become a member of

the Community". This should assure the Turkish government that the EC has no reservations regarding Turkey's religious identity or its geographic position as a European country (Hale, W., 1992).

Other reasons for rejecting Turkey's application were mainly political and economic. On the political side, Turkey's human rights record, its repression of the Kurds in the south east of the country, and its restrictions on trade unions' activities were cited as barriers to full membership. In addition, Turkey's disputes with Greece both regarding Cyprus and offshore oil rights in the Aegean, were considered as obstacles for accession.

Implicitly, the developments in eastern Europe and the possibility of Hungary and Czechoslovakia applying for full membership in addition to other countries from the EFTA region, who may be in a stronger position to join the Community, presented another obstacle for an early Turkish full membership.

On the economic side, the disparities in income between the Community and Turkey present problems. Its income is less than one third of the average level of the Community. In addition, Turkey has high unemployment levels and a weak social security schemes. In these respects, the Community expects that the potential cost to the rest of the Community of Turkish accession would be high. Also, it is feared that because agricultural prices in Turkey are lower than the rest of the Community, the cost for the EC to support these prices to the levels of the CAP will be substantial. On Turkey's side, it is expected that the increase in agricultural prices under CAP would lead to an increase in food prices causing inflationary pressures. The increase in prices would increase the demand for higher wages thus eroding Turkey's comparative advantage in low labour costs (Hale, W.,

1990). However, another argument may be that the increase in the income of Turkish farmers due to CAP would have a multiplier effect in terms of increasing consumption and savings. This would increase investment and enhance economic growth both in the urban and rural areas.

The Opinion also included the need for accomplishing the customs union by 1996, intensifying the dialogue between Ankara and the EC, starting negotiations to release the fourth financial protocol, and more cooperation at the financial and the industrial level. These were expected to enforce their interdependence and intensify the relations between Turkey and the EC as stated in the Ankara agreement.

3.17 Turkey and the Black Sea Region

The Black Sea and its surroundings is considered to have a great wealth potential with respect to tourism and trade. In that respect, the Black Sea Economic Cooperation Declaration signed in June 1992 in Istanbul is considered an important step forward towards economic development in Turkey. The countries that signed the declaration were: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania, Russia, Ukraine, Greece, and Turkey. The main objectives of the declaration are: the free movement of the means of production (mainly people), cooperation in several fields (trade, industry, science and technology, environment, health, agriculture, tourism, mining, energy, transport, economic and commercial information, and pharmaceuticals), reducing or eliminating trade barriers, and seeking possibilities of establishing a Black Sea Foreign Trade and Investment Bank (there are already some Japanese and European agencies interested in shares in

this Bank). Although the member states in the Declaration might have conflicting economic interests, it is believed that a common customs policy will be mutually beneficial. It is hoped that, this declaration will help Turkey increase its exports and emerge as an economic power house in the region, channelling western technology and capital to the Black Sea states in need of investment and modernisation (Briefing, 1991 and 1992).

Cooperation between Turkey and other countries; especially in the former Soviet Union, has already started with the number of joint ventures between Turkish and Azeri companies reaching about 50. There are hundreds of such projects in the pipe line. Meanwhile, the Russian ambassador in Ankara expected the total volume of trade between Turkey and Russia to reach US\$ 10 billion by 1997 (although that volume was US\$ 1,500 million only in 1991). On the other hand, it is worth mentioning that there are problems also, Russia for instance has incurred payment arrears of around US\$ 48 million from a US\$ 1.15 billion credit extended by the Turkish Exim Bank. This led the Bank to freeze the credit (Economist Intelligence Unit, 1992).

The question that may be asked here is whether Turkey regards the Black Sea economic cooperation region as a substitute or complement to its full membership in the EC. There is no doubt that Turkey's relations with the Black Sea countries will have positive impact on the Turkish economy in the form of increasing trade which could contribute to the economic growth of the country. However, it is unlikely that Turkey would give up its demand for a full membership in the EC. After all, it is mainly the politics rather than the economics of a full membership in the EC that Turkey is interested in. In that respect, the economic growth that

may take place in Turkey in the coming decade due to Turkey's relations with the Black Sea countries may increase the per capita income in Turkey. This increase in income with its multiplier effect may leave the political issues that the EC Commission mentioned in its Opinion (if not solved) as the only barrier.

3.18 Conclusion

It is difficult to confirm whether Turkey's 1980 adjustment programme was a success or a failure; since it was a mixture of both. On the one hand, the programme managed to get Turkey out of the 1979 foreign exchange crisis through improving its trade balance substantially, restoring economic growth, reducing inflation (although it started rising again since 1987), eliminating the distortions caused by the black market in trade and exchange rate, reducing the income distribution gap, and increasing the inflow of capital through liberalising its foreign exchange controls. On the other hand, the costs that Turkey had to pay for such an improvement were considerable. Its foreign debts more than tripled and its currency lost substantial amounts of its value. Despite paying such a high cost, Turkey perhaps had no other choice to solve its economic problems.

Since the establishment of the modern Turkish state in the 1920s, the Turkish currency was always overvalued and prices did not reflect the real costs of products leading to excess demand and more pressure on foreign exchange reserves. As to the money supply, Turkey always solved the shortage in deposits needed to finance its economic growth through increasing its money stock; hence, fuelling inflation and adding pressure on the exchange rate parity.

In the end, it seems that the programme was a mixed blessing. It managed to

boost the Turkish economy, but at costs which some of the programme supporters believe that Turkey would have had to pay sooner or later with or without adjustment. Also, it should be added that the survival of the adjustment process in Turkey was mainly due to the hesitance with respect to economic policy on the part of the Turkish governments in the late 1970s. This was followed by the military coup of September 1980 that supported structural adjustment and eliminated any effective opposition to the new system.

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Chapter IV

The Impact of Liberalisation on the Turkish Economy: A Comparison with the 1970s

4.1 Introduction

It is difficult to determine the impact of the 1980 adjustment programme on the Turkish economy unless an econometric study is carried out. In this study, the different relations between the major variables influencing the performance of the economy will be determined. The purpose of this chapter is to examine the econometric relations in the 1970s and 1980s which may help to determine the changes that occurred in those relations due to the 1980 economic reforms. The figures used to build the econometric models have been collected from official Turkish sources and the International Monetary Fund (International Financial Statistics).

During the 1970s, the Turkish economy was characterised by government policies that centered on price controls, an overvalued exchange rate, financial repression, and a restrictive trade regime. These policies, which the consecutive Turkish governments implemented since the establishment of the Turkish state, were designed to serve the objective of the so-called "etatism", which is mainly an inward-oriented strategy adopted by all the Turkish governments until 1980.

Before 1980, prices in Turkey were not determined on the basis of profit maximisation or cost of production; especially with respect to the products of the

state economic enterprises (SEE). Rather, an interventionist policy was adopted by the governments which determined the prices of the SEE products and agricultural products disregarding market forces; although, some argue that the major determinant of prices was the socio-political environment prevailing at the time (Hatiboglu, Z., 1978).

Until the beginning of the 1980s, Turkey followed a multiple exchange rate system which was overvalued by varying degrees throughout the 1970s. There were two official exchange rates, a lower rate (TL 35 per US dollar) applied to most agricultural exports, imports of fertilisers, imports of petroleum, and petroleum products, and a higher rate (TL 47 per US dollar) applied to all other transactions. Moreover, there was a limited official parallel market for exporters of manufactured products and minerals (World Bank, 1980).

Within its financial market, Turkey had a fixed interest rates policy despite the rise in inflation. This rendered real interest rates negative throughout the 1970s. Moreover, in addition to the disequilibrium in interest rates, the Turkish economy was characterised by credit rationing and excessive intermediation costs.

High tariffs and similar levies (stamp duty, port charges, ...etc.) were imposed on imports into Turkey during the seventies. In addition, there were lists of goods which importers were allowed to import; these lists were the liberalisation list, quota list, and the bilateral trade agreement list (Hatiboglu, Z., 1978). This licensing system for imports was established to protect domestic industry and to ensure that the limited amount of official foreign exchange available was allocated among different commodities needed for economic development.

On the exports front, the government provided exporters with financial incentives that included: tax rebates, abatement of customs duties on imported equipment, preferential credits and others. However, these incentives were not sufficient to eliminate the bias against exports because they were too limited and should have been increased (World Bank, 1980).

Turkey ended the 1970s in a hopeless economic situation, inflation was more than 100% and rising, unemployment above 10% and rising, there was a worsening current account, shortages of supply for the consumer and industrial markets, negative GNP growth and above all Turkey lost its creditworthiness in the international money market where creditors refused to lend her any more.

Being in such a bad economic situation and facing a debt crisis, the Turkish government realised that it was no longer possible to continue the same line of policies i.e., import-substitution. Therefore, on the 24th of January, 1980 the Ozal administration followed the path of liberalisation under the auspices of the International Monetary Fund. However, although previous Turkish governments had adopted relatively more liberal policies at the time of crises such as in 1958, 1970, and 1977-79, these policies were always half-hearted and not the right dose of liberalisation that Turkey needed to recover. Thus nothing short of an overall restructuring of the economy was necessary and immediate and substantial reforms in economic management became crucial as, in addition to the government's belief that it was the time for fundamental changes, foreign creditors refused to provide Turkey with the funds it badly needed unless it reached an agreement with the IMF to reduce the current account deficit and improve the allocation of resources.

The effects of the 1980 adjustment programme on Turkey have been ambiguous.

Exports rose sharply since 1980 reaching almost double their volume in 1982 while imports did not rise by the same proportion as exports; thereby narrowing the trade deficit gap, increasing the flow of foreign exchange, and paving the way for Turkey to regain its creditworthiness in the international market. The question which must be asked is whether it was the exchange rate liberalisation which caused this increase in exports. According to the theory that the IMF embraces, the answer is yes, it is the exchange rate that made Turkey's products more competitive in the world market; hence, increasing the demand for them.

Our investigation considers whether the IMF's view is correct in the case of Turkey. For this purpose, two models have been designed, one for the decade before structural adjustment i.e., 1970-1979 and the second for the 1980-1989 period i.e., after economic reforms. This will facilitate a comparative study for the two periods regarding the impact of liberalisation on the Turkish economy after 1980.

Many regression equations were tried which gave a notion of the forces affecting the Turkish economy, the most conclusive ones were put in the appendix at the end of the chapter. In addition, several economic models, some of which were specifically for Turkey, were consulted before deciding on the final one below. Celasun's (1986) model Simlog-1 may have been the most appropriate model since it is a general equilibrium system influenced by macroeconomic and external trade relations characterising the Turkish economy. However, an enormous amount of data was needed, given the size of the model (91 equations). This was not available for the Turkish economy which precluded the use of the model.

The structural form of the model used in this chapter is a modification of the Conway model (Nas, T. and Odekon, M., 1988) which was originally designed to

test the impact of trade liberalisation on Turkey. Several equations were added to the model to reflect the impact of structural adjustment as a whole on variables including those used by Conway. However, the lack of data on several variables used by Conway in his model required their replacement by proxies. Real capital stock was replaced by real investment, total output was replaced by industrial output, real imports replaced real imported inputs use, US inflation replaced real dollar price of imported goods, and expected inflation was replaced by the exchange rate as any devaluation would alarm people to a possible round of rises in prices. It is worth mentioning that Conway's model is an extension of his previous model (Conway, P., 1987) which was designed mainly to study the effects of external shocks and trade liberalisation on the Turkish economy.

The simultaneous equations in the structural form were estimated using two-stage least squares. Moreover, after estimation, the real consumption equation that was part of Conway's model was found to have a very low R^2 (0.23) according to my data. Therefore, it was dropped from the simultaneous system.

The second section of this chapter presents the economic model for Turkey after 1980 with an interpretation of the results. The third section demonstrates the results of the estimation of the model for the 1970-1979 period. In the fourth section, a comparative study will be carried out for the two models and their results. Finally, the fifth section provides the conclusions and remarks on the findings followed by the appendix.

4.2 Econometric Model for Turkey after 1980

The model below is a simple macroeconomic model for Turkey composed of

a simultaneous linear equation system in logarithmic form. The core part of the model i.e., Conway's model, consists of the equations for the dependent variables of industrial production, real gross domestic product (RGDP), labour, real imports, real investment, real money supply, and real quasi-money supply. The rest of the equations were incorporated in the model in order to modify it for the purposes of this study. The model has no lags which is one of its advantages given the limited number of observations available. In addition, since the data used are annual, it may be assumed that one year is enough to spot any changes, in the short-run, in the economic variables under study. It is the lack of data and the consequent weakness of some statistical results that make the conclusions from this model tentative and indicative only.

Estimation of the equations below suggests that real imports have a negative effect on industrial production in Turkey as the former increases while an increase in industrial production would lead to an increase in imports. This confusing result may be explained on the basis that Turkish imports are divided into consumption goods, intermediate goods, and capital goods (unfortunately there is no data based on that classification). Therefore, it is assumed that the increase in the imports of consumption goods is negatively affecting Turkish industrial output due to more competitiveness of imported products. On the other hand, the imports of industrial intermediate and capital goods are necessary for increasing production in manufacturing; hence, the positive relationship. These findings show the need for selectivity in Turkey with respect to trade liberalisation as import-substitution industries are hit by unprotected trade. Moreover, labour as an input plays an important role in industrial production and contributes to real economic growth.

Structural form of the Simultaneous Equations in the 1980s

$$\begin{aligned} \ln(\text{IP}) = & - 359.9 - 0.37\ln(\text{RGDP}) - 0.47\ln(\text{Rimports}) + 22.2\ln(\text{Labour}) \\ & (28.3) \quad (0.8) \quad (0.2) \quad (1.7) \\ & - 0.31\ln(\text{Rwages}) \dots \dots \dots (1) \\ & (0.16) \end{aligned}$$

$$R^2 = 0.99 \quad \text{DW} = 2.9 \quad (\text{chi-square for serial correlation} = 3.05)$$

$$\begin{aligned} \ln(\text{RGDP}) = & - 6.6 + 0.37\ln(\text{RI}) + 0.43\ln(\text{Labour}) + 0.06\ln(\text{Rimports}) \dots (2) \\ & (5.2) \quad (0.04) \quad (0.3) \quad (0.04) \end{aligned}$$

$$R^2 = 0.99 \quad \text{DW} = 2.45 \quad (\text{chi-square for serial correlation} = 2.74)$$

$$\begin{aligned} \ln(\text{Labour}) = & 16.3 + 0.73\ln(\text{RGDP}) - 0.17\ln(\text{RI}) - 0.02\ln(\text{Rwages}) \dots (3) \\ & (0.6) \quad (0.33) \quad (0.1) \quad (0.03) \end{aligned}$$

$$R^2 = 0.95 \quad \text{DW} = 1.74 \quad (\text{chi-square for serial correlation} = 3.45)$$

$$\begin{aligned} \ln(\text{Exports}) = & 7.85 + 0.43\ln(\text{Exchange}) - 0.91\ln(1+t) + 1.03\ln(\text{IP}) - \\ & (1.3) \quad (1.0) \quad (0.4) \quad (0.9) \end{aligned}$$

$$\begin{aligned} & 0.7\ln(\text{Rwages}) \dots \dots \dots (4) \\ & (0.4) \end{aligned}$$

$$R^2 = 0.99 \quad \text{DW} = 1.60 \quad (\text{chi-square for serial correlation} = 0.001)$$

$$\begin{aligned} \ln(\text{Rimports}) = & 4.85 - 0.2\ln(\text{USinfl}) + 0.18\ln(\text{IP}) + 0.15\ln(1+t) \dots (5) \\ & (0.4) \quad (0.08) \quad (0.04) \quad (0.2) \end{aligned}$$

$$R^2 = 0.92 \quad \text{DW} = 2.25 \quad (\text{chi-square for serial correlation} = 0.70)$$

$$\begin{aligned} \ln(\text{RI}) = & - 3.01 + 1.74\ln(\text{RGDP}) + 0.12\ln(\text{Rwages}) + 0.007\text{RIRR} \dots (6) \\ & (0.4) \quad (0.11) \quad (0.07) \quad (0.006) \end{aligned}$$

$$R^2 = 0.99 \quad \text{DW} = 1.66 \quad (\text{chi-square for serial correlation} = 0.28)$$

$$\begin{aligned} \ln(\text{WPI}) = & 2.66 + 1.01\ln(\text{Exchange}) + 0.02\ln(\text{RM2}) + 0.2\ln(\text{USinfl}) \dots (7) \\ & (0.5) \quad (0.07) \quad (0.4) \quad (0.1) \end{aligned}$$

$$R^2 = 0.99 \quad \text{DW} = 2.16 \quad (\text{chi-square for serial correlation} = 1.08)$$

$$\begin{aligned} \ln(\text{RM2}) = & - 2.03 + 0.23\ln(\text{DIR}) + 1.6\ln(\text{RGDP}) - 0.09\ln(\text{Exchange}) \dots (8) \\ & (0.1) \quad (0.03) \quad (0.3) \quad (0.05) \end{aligned}$$

$$R^2 = 0.98 \quad \text{DW} = 2.58 \quad (\text{chi-square for serial correlation} = 3.86)$$

$$\ln(\text{RQM2}) = - 4.85 + 0.75\ln(\text{DIR}) + 2.9\ln(\text{RGDP}) - 0.22\ln(\text{Exchange}) \dots (9)$$

(0.4) (0.1) (1.1) (0.2)

$R^2 = 0.95$ $\text{DW} = 2.08$ (chi-square for serial correlation = 0.16)

$$\ln(\text{Rdeposits}) = - 0.74 + 0.38\ln(\text{DIR}) + 0.55\ln(\text{RWAGES}) \dots (10)$$

(0.5) (0.04) (0.08)

$R^2 = 0.94$ $\text{DW} = 2.20$ (chi-square for serial correlation = 1.51)

$$\ln(\text{Rcredits}) = - 0.96 + 0.36\ln(\text{DIR}) + 0.77\ln(\text{RM2}) \dots (11)$$

(0.6) (0.22) (0.25)

$R^2 = 0.93$ $\text{DW} = 1.88$ (chi-square for serial correlation = 0.006)

- | | |
|------------------------------------|--|
| RI = real investment | Exchange = nominal exchange rate |
| IP = industrial production | t = effective tariffs |
| RGDP = real gross domestic product | USinfl = US inflation |
| Rimports = real imports | RIRR = real international rate of return |
| Rwages = real wages | |
| Rcredits = real credits from banks | RM2 = real money supply |
| DIR = nominal interest rates | Rdeposits = real deposits in banks |
| RQM2 = real quasi-money supply | |

N.B.: the chi-square for serial correlation was included because of the small number of observations (degrees of freedom) which renders the DW test unreliable. The critical value of the chi-square in this case is 3.84 at the 5% significance level.

The increase in wages has a very minor effect on employment in Turkey which suggests that there was an inelastic demand for labour. However, this result is not statistically significant, thus it requires a very cautious interpretation. Labour is

of course the main input in both industry and agriculture and hence any economic growth relies on labour. This is clear from equations 2 and 3 which suggest that any 1 per cent increase in labour is accompanied by a 0.43 per cent increase in real GDP, while a 1 per cent increase in real GDP may lead to a 0.73 per cent increase in labour use. The statistical insignificance should be noted, however, so caution must also be exercised in the interpretation.

An increase in real imports by 1 per cent has a very minor (0.06 per cent) impact on economic growth in Turkey. However, on the export side, industrial production seems to be the driving force behind the rise in exports in the 1980s (supporting the results of the regression equations in the appendix). The elasticity of those two variables is almost unity. On the other hand, the exchange rate devaluation has a relatively much weaker effect where a 1 per cent depreciation in the value of the Turkish lira would lead to a 0.43 per cent increase in exports. From this result, one may conclude that although the continuing devaluation in the lira since 1980 has a positive effect on Turkey's exports, the fact that the country had enough unutilised industrial capacity in addition to other factors (availability of foreign exchange, export incentives, and depressed domestic demand) was the spearhead of the remarkable increase in the volume of Turkish exports; especially in the early 1980s.

The inflationary impact of the depreciation in the Turkish currency is substantial. It may be argued that the stricter monetary policy followed after 1980 in terms of money creation in comparison with the 1970s led to a negligible impact on the increase in prices. However, the instability in the value of the lira against foreign currencies is the major contributor to inflation in Turkey after economic

reforms.

Real money supply is mainly affected by economic growth where a 1 per cent increase in real gross domestic product leads to a 1.6 per cent increase in real M2 and a 2.86 per cent increase in real quasi-money supply (foreign currency, time, and saving deposits). These results agree with the economic theory since any economic growth requires monetary growth to finance it otherwise demand will not be met by supply leading to stagnation and inflation (stagflation). However, it is clear that the multipliers of real M2 and RQM2 are quite high mainly due to the role of the state and its SEEs as the main investors in Turkey who rely on Central Bank finances.

The above analysis mainly demonstrates the relationship between the endogenous variables in the structural form of the model and other variables in that model. However, the question that may arise here concerns the effect of the predetermined variables (exogenous variables) on the endogenous variables. This is made up of two components: the direct effect of a predetermined variable on the endogenous variable in question (an effect that could be captured from the above structural form of the model) and the indirect effect through the effect of the predetermined variable on another endogenous variable which in turn influences the endogenous variable in question. This total effect is captured by the reduced form of the model below which expresses each endogenous variable solely in terms of predetermined variables having solved out the simultaneous interaction of the endogenous variables within themselves (Desai, M., 1976). In the familiar notation we have the reduced form equation $By = Ax + u$ of the structural form which turned out to be, in matrix form and ignoring the error term, according to Klien

model I as follows:

$$\begin{pmatrix}
 1 & 0.37 & -22.16 & 0 & 0.47 & 0 & 0 & 0 & 0 & 0 & 0 \\
 0 & 1 & -0.43 & 0 & -0.07 & -0.3 & 0 & 0 & 0 & 0 & 0 \\
 0 & -0.74 & 1 & 0 & 0 & 0.17 & 0 & 0 & 0 & 0 & 0 \\
 -1.03 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\
 -0.18 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\
 0 & -1.74 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 1 & -0.02 & 0 & 0 & 0 \\
 0 & -1.6 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\
 0 & -2.87 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 0 & -0.78 & 0 & 0 & 1
 \end{pmatrix}
 \begin{pmatrix}
 \ln(IP) \\
 \ln(RGDP) \\
 \ln(Labour) \\
 \ln(Exports) \\
 \ln(Rimports) \\
 \ln(RI) \\
 \ln(WPI) \\
 \ln(RM2) \\
 \ln(RQM2) \\
 \ln(Rdeposits) \\
 \ln(Rcredits)
 \end{pmatrix}
 =$$

$$\begin{pmatrix}
 -359.9 & 0 & 0 & 0 & 0 & -0.31 & 0 \\
 -6.6 & 0 & 0 & 0 & 0 & 0 & 0 \\
 16.3 & 0 & 0 & 0 & 0 & -0.02 & 0 \\
 7.85 & 0 & -0.91 & 0.43 & 0 & -0.7 & 0 \\
 4.85 & -0.2 & 0.15 & 0 & 0 & 0 & 0 \\
 -3.0 & 0 & 0 & 0 & 0.007 & 0.12 & 0 \\
 2.7 & 0.23 & 0 & 1.01 & 0 & 0 & 0 \\
 -2.03 & 0 & 0 & -0.09 & 0 & 0 & 0.24 \\
 -4.85 & 0 & 0 & -0.23 & 0 & 0 & 0.75 \\
 -0.75 & 0 & 0 & 0 & 0 & 0.55 & 0.39 \\
 -0.95 & 0 & 0 & 0 & 0 & 0 & 0.36
 \end{pmatrix}
 \begin{pmatrix}
 \text{unity} \\
 \ln(USinfl) \\
 \ln(1+t) \\
 \ln(Exchange) \\
 RIRR \\
 \ln(Rwages) \\
 \ln(DIR)
 \end{pmatrix}$$

Hence, the reduced form $y = B^{-1}Ax$ is, in matrix form:

$$\begin{pmatrix} \ln(IP) \\ \ln(RGDP) \\ \ln(Labour) \\ \ln(Exports) \\ \ln(Rimports) \\ \ln(RI) \\ \ln(WPI) \\ \ln(RM2) \\ \ln(RQM2) \\ \ln(Rdeposits) \\ \ln(Rcredits) \end{pmatrix} = \begin{pmatrix} 6.01 & -1.96 & 1.47 & 0 & 0.26 & 0.95 & 0 \\ -0.4 & -0.23 & 0.18 & 0 & 0.03 & 0.24 & 0 \\ 16.63 & -0.1 & 0.08 & 0 & 0.01 & 0.06 & 0 \\ 14.04 & -2.02 & 0.6 & 0.43 & 0.26 & 0.28 & 0 \\ 5.93 & -0.55 & 0.41 & 0 & 0.05 & 0.17 & 0 \\ -3.7 & -0.41 & 0.31 & 0 & 0.06 & 0.53 & 0 \\ 2.65 & 0.22 & 0.01 & 1.01 & 0 & 0.01 & 0 \\ -2.67 & -0.37 & 0.28 & -0.09 & 0.05 & 0.38 & 0.24 \\ -6.01 & -0.67 & 0.5 & -0.23 & 0.09 & 0.68 & 0.75 \\ -0.75 & 0 & 0 & 0 & 0 & 0.55 & 0.39 \\ -3.04 & -0.29 & 0.22 & -0.07 & 0.04 & 0.29 & 0.55 \end{pmatrix} \begin{pmatrix} \text{unity} \\ \ln(USinfl) \\ \ln(1+t) \\ \ln(Exchange) \\ RIRR \\ \ln(Rwages) \\ \ln(DIR) \end{pmatrix}$$

The above reduced form model shows the impact of any change in the exogenous variables on the endogenous variables under study during the 1980-1989 period. It is clear that world inflation (proxied by US inflation) has a substantial effect on Turkish exports as any rise in the prices of capital and intermediate goods would hit the competitiveness of Turkish exports. An increase in world inflation would lead to a reduction in industrial production in Turkey where domestic producers depend on imported inputs in manufacturing. So, although a rise in prices abroad may, in theory, increase the competitiveness of Turkish products in the international market, the fact that domestic production will be adversely affected by that increase in prices would have a negative impact on exports given the direct relation between the two (see equation 4 in the structural form above). The above argument is clearer when one looks at the relation between US inflation and real imports where the latter decreases by 0.55 per cent for every 1 per cent increase in world prices. This would then have its multiplier effect on exports and industrial

production, decreasing the latter by 1.96 per cent and the former by 2.02 per cent. It is worth mentioning that the multiplier effect of an increase in US inflation on exports and industrial production is almost equal i.e., about 2 per cent, reflecting the result in the structural form where the elasticity of change in exports to any change in industrial production is almost unity.

In addition, the decline in exports, industrial production, real investment, and real money supply has an impact on real GDP which would shrink as a result by 0.23 per cent for a 1 per cent increase in world prices. The above reduced form shows that inflation (proxied here by the wholesale price index) in Turkey is slightly affected by international inflation. The rise in Turkish inflation and the decline in real investment and industrial production would consequently lead to a decline in real credits and real money supply, but real deposits will remain unaffected.

Trade liberalisation in Turkey after 1980 with the reduction in tariffs on imported goods that followed had a considerable effect on many variables such as industrial production, exports, real imports, real investment, real money, and real quasi-money supply. An increase in tariffs, in the 1980s, by 1 per cent would increase production in the manufacturing sector by 1.47 per cent, a result that shows how more protection to domestically produced goods in Turkey may help increase productivity. Furthermore, the impact on industrial production is reflected by exports and imports which increase by 0.6 per cent and 0.41 per cent respectively for every 1 per cent increase in tariffs. In addition, any increase in tariffs would encourage real investment to meet the demand domestically (for import substitutes) and abroad (exports). Meanwhile, it is worth mentioning that a rise in tariffs would have a minor effect on real imports and a substantial negative effect on exports in

the structural form of the model; however, the picture changed after allowing for the total effect to take place. A question that may be raised here is why exports would rise with an increase in tariffs which would increase the cost of production; especially in industries that rely on imported inputs, which would consequently erode the competitiveness of Turkish goods abroad? A possible explanation could be that first, in most cases in Turkey, tariffs are higher on final goods than intermediate goods; this together with the increase in demand for domestic goods explains the rise in industrial production.

Conway (1987) comments on the effects of trade liberalisation in the 1980s saying that the trade liberalisation policy with the largest positive impact on the trade balance was the lowering of imported-input tariffs and non-tariff barriers. This means costs of imported inputs are not very high for Turkish exporters and producers which allows them to remain quite competitive internationally. Second, despite the existence of some tariffs on imported inputs, other factors, such as the depreciation in the Turkish lira, the existence of unutilised capacity, and export incentives, do contribute to the growth in exports and the competitiveness of Turkish exporters in world markets. Baysan and Blitzer (in Aricanli, T. and Rodrik, D., 1990) believe that improved EERs (effective exchange rates in Turkey), provided the needed extra push on the supply side. At the same time, EERs above the level corresponding to the upward turning point of marginal costs (where unused capacity starts disappearing) would, in the short run, be expected to generate little additional supply response but would improve financial profits for the exporters, strengthening firms' balance sheets.

On the other hand, the increase in tariffs does not inhibit imports (real imports

would rise by 0.41 per cent for a 1 per cent increase in tariffs) which shows their (imports) inelasticity; especially with respect to intermediate and capital goods. The demand for imports will result in an increase in the demand for real credits as the rise in tariffs makes imported goods more expensive. A 1 per cent increase in tariffs would result in a 0.22 per cent increase in real credits with no effects on real deposits. This situation will lead to an expansion in real money and quasi-money supply by 0.28 per cent and 0.5 per cent respectively.

The impact of tariffs on inflation in the 1980s is considered very small according to the reduced form for the model above. A 1 per cent increase in tariffs leads to a 0.01 per cent increase in inflation. This result is contradictory to the findings of Conway (1987) who concluded that tariff reduction lowered prices through lower production costs and through lower imported final-goods prices.

With respect to the exchange rate, the depreciation in the lira had a moderate effect on exports as discussed above. On the other hand, the total effect of depreciation on prices is inflationary with an elasticity of almost unity. This result supports Conway's (1987) findings that the devaluations of the period led to increased inflation. Also, the changes in the exchange rate of the lira has a minor effect on investment due to the zero multiplier in the reduced form of the model (a zero means a very minor or non-existing relationship). Moreover, the impact of depreciation in the lira on the expansion of real M2 is very minor and negative. A 1 per cent increase in the exchange rate i.e., depreciation, may lead to a 0.09 decline in real M2. However, although the nominal money supply increased substantially in the last decade due to the bolstering of the Central Bank's devaluation account, real M2 did not follow the same trend. It is worth mentioning that the devaluation

account which shows the net foreign liabilities of the Bank has grown dramatically in recent years as a result of the Bank's growing foreign liabilities (workers' remittances, foreign investment, exports, and foreign exchange borrowing, ...etc.) and the rapid depreciation in the Turkish lira (OECD Economic Surveys, 1990/1991). On the other hand, the expansion in money supply to finance the public sector borrowing requirement (which increased due to the continuous fall in the value of the Turkish currency) diminished substantially in the 1980s from about 34 per cent of total PSBR in 1980 to about 4 per cent in 1991 (OECD Economic Surveys, 1990/1991).

The real international rate of return (RIRR) was found to have a minor impact on the Turkish economic performance according to the above study. The only result worth mentioning is the multiplier for industrial production and exports which increase by 0.26 per cent each for every 1 per cent increase in RIRR.

Moreover, real wages have a substantial impact on industrial production. Any 1 per cent increase in the former leads to a 0.95 per cent increase in the latter possibly as a result of increasing demand due to higher real incomes. The increase in industrial production would subsequently affect exports and real investment which would increase to meet the rise in demand.

However, a rise in real wages does not, surprisingly, lead to a rise in prices despite the increase in demand, although Turkish industries are mainly labour-intensive. This may be due to the low share of labour costs in the income statement of Turkish manufacturing firms which stood at an average of about 7 per cent of total sales between 1982 and 1988 in comparison with about 20% for German, Italian, and Spanish firms (see table 5.5). Moreover, a rise in real wages by 1

per cent would lead to a 0.55 per cent increase in real deposits and 0.29 per cent increase in real credits. The former would rise due to the increasing marginal propensity to save while the latter would increase to finance real investment.

Finally, an increase in nominal interest rates in Turkey by 1 per cent would have a strong effect on real quasi-money supply (0.75 per cent), a moderate effect on real deposits (0.39 per cent) and real credits (0.55 per cent), and a weak effect on real money supply (0.24 per cent). The relationship between interest rates on the one hand and real deposits and credits on the other hand is interesting because it is expected, according to the theory, that a stronger positive relationship would exist between interest rates and deposits and a negative relationship between the former and credits. These results show that the liberalisation of interest rates in Turkey had a less than expected performance while credits are inelastic to changes in the costs of borrowing, probably due to Turkey's thin financial markets and the role of the government as a major borrower.

Other researchers in the field arrived at the same conclusion with respect to the relation between interest rates and deposits. Anand, Chhibber, and van Wijnbergen (Arıcanlı, T. and Rodrik, D., 1990) found that the higher than average growth in the Turkish economy and in private disposable income is perceived as temporary rather than permanent which would therefore have a smaller effect on consumption and a larger effect on savings. On the other hand, they found that rising real rates of interest have been a major factor in the increase in private savings. However, Rittenberg concluded the opposite. He found that the interest rate policy and the financial environment (in Turkey) appear to have been working at odds in the post-liberalisation period. Despite higher real interest rates,

shaken public confidence discouraged savings. Although both studies used econometric methods, the results were conflicting; hence, the findings of this study are considered somewhere in between.

Moreover, it should be made clear that some variables used in the estimation of the equations of the above model are not significantly different from zero due to the high standard of error as a result of the small sample used in the study. However, it was inconvenient to drop them due to their theoretical importance in determining the variable in question.

4.3 An Econometric Model for the 1970s

The structural form of the model made up of the 11 simultaneous equations below shows the relations between the same variables under study in the previous section. This was necessary in order to spot the changes that occurred in the Turkish economy after implementing the 1980 economic reforms.

Equation one below shows that industrial production in Turkey is negatively related to real imports. As imports increased by 1 per cent, industrial production would decrease by 0.54 per cent, a result that justifies the protectionist policies adopted by different Turkish government to protect their industries. In addition, an increase in real wages would have a negative impact on industrial production which again defends the fixed wages policy adopted by Turkey before 1980. However, it must be made clear that this (last) result is statistically not significant due to the high standard error of the coefficient. Hence, this result should be treated with extreme caution.

Structural form of the Simultaneous Equations in the 1970s

$$\ln(\text{IP}) = -170.2 + 0.88\ln(\text{RGDP}) - 0.54\ln(\text{Rimports}) + 10.9\ln(\text{Labour}) - 0.78\ln(\text{Rwages}) \dots\dots\dots(1)$$

(19.2) (0.3) (0.2) (1.24)
(0.8)

$$R^2 = 0.99 \quad \text{DW} = 2.6 \text{ (chi-square for serial correlation} = 1.77)$$

$$\ln(\text{RGDP}) = 20.8 + 0.95\ln(\text{RI}) - 1.16\ln(\text{Labour}) + 0.04\ln(\text{Rimports}) \dots\dots(2)$$

(16.5) (0.2) (0.9) (0.11)

$$R^2 = 0.95 \quad \text{DW} = 1.12 \text{ (chi-square for serial correlation} = 1.06)$$

$$\ln(\text{Labour}) = 18.9 - 0.37\ln(\text{RGDP}) + 0.45\ln(\text{RI}) - 0.21\ln(\text{Rwages}) \dots\dots\dots(3)$$

(2.0) (0.19) (0.2) (0.2)

$$R^2 = 0.87 \quad \text{DW} = 1.51 \text{ (chi-square for serial correlation} = 0.00004)$$

$$\ln(\text{Exports}) = 2.0 - 3.42\ln(\text{Exchange}) + 7.82\ln(1+t) + 1.96\ln(\text{IP}) + 0.93\ln(\text{Rwages}) \dots\dots\dots(4)$$

(4.0) (1.2) (3.1) (0.4)
(0.5)

$$R^2 = 0.99 \quad \text{DW} = 2.72 \text{ (chi-square for serial correlation} = 3.06)$$

$$\ln(\text{Rimports}) = 5.54 - 0.1\ln(\text{USinfl}) + 0.25\ln(\text{IP}) - 5.0\ln(1+t) \dots\dots\dots(5)$$

(0.6) (0.22) (0.09) (1.4)

$$R^2 = 0.84 \quad \text{DW} = 2.15 \text{ (chi-square for serial correlation} = 0.96)$$

$$\ln(\text{RI}) = - 8.17 + 1.42\ln(\text{RGDP}) + 0.92\ln(\text{Rwages}) - 0.02\text{RIRR} \dots\dots\dots(6)$$

(4.7) (0.15) (0.6) (0.02)

$$R^2 = 0.97 \quad \text{DW} = 1.99 \text{ (chi-square for serial correlation} = 0.06)$$

$$\ln(\text{WPI}) = 5.06 + 0.69\ln(\text{Exchange}) + 1.6\ln(\text{RM2}) + 0.2\ln(\text{USinfl}) \dots\dots\dots(7)$$

(3.1) (0.7) (1.1) (0.3)

$$R^2 = 0.78 \quad \text{DW} = 1.74 \text{ (chi-square for serial correlation} = 0.69)$$

$$\ln(\text{RM2}) = - 0.83 - 0.06\ln(\text{DIR}) + 0.89\ln(\text{RGDP}) - 0.09\ln(\text{Exchange}) \dots\dots\dots(8)$$

(0.2) (0.09) (0.12) (0.06)

$$R^2 = 0.98 \quad \text{DW} = 1.97 \text{ (chi-square for serial correlation} = 0.08)$$

$$\ln(\text{RQM2}) = 1.64 - 1.27\ln(\text{DIR}) + 2.2\ln(\text{RGDP}) - 0.98\ln(\text{Exchange}) \dots\dots\dots(9)$$

(1.0) (0.37) (0.47) (0.26)

$$R^2 = 0.77 \quad \text{DW} = 1.71 \text{ (chi-square for serial correlation} = 0.38)$$

$$\ln(\text{Rdeposits}) = 0.71 + 0.77\ln(\text{DIR}) + 0.26\ln(\text{Rwages}) \dots \dots \dots (10)$$

(10.0) (0.4) (1.36)

$$R^2 = 0.53 \quad \text{DW} = 1.12 \quad (\text{chi-square for serial correlation} = 0.80)$$

$$\ln(\text{Rcredits}) = 1.65 - 0.43\ln(\text{DIR}) + 1.64\ln(\text{RM2}) \dots \dots \dots (11)$$

(0.3) (0.08) (0.15)

$$R^2 = 0.95 \quad \text{DW} = 2.21 \quad (\text{chi-square for serial correlation} = 0.2)$$

- | | |
|------------------------------------|--|
| RI = real investment | Exchange = nominal exchange rate |
| IP = industrial production | t = effective tariffs |
| RGDP = real gross domestic product | USinfl = US inflation |
| Rwages = real wages | RIRR = real international rate of return |
| Rimports = real imports | |
| DIR = nominal interest rates | RM2 = real money supply |
| Rcredits = real credits from banks | Rdeposits = real deposits in banks |
| RQM2 = real quasi-money supply | |

N.B.: the chi-square for serial correlation was included because of the small number of observations (degrees of freedom) which renders the DW test unreliable. The critical value of the chi-square in this case is 3.84 at the 5% significance level.

Moreover, real gross domestic product was found to have a strong relation with real investment. A 1 per cent increase in real investment would lead to a 0.95 per cent increase in real GDP. This may be due to the impact of public investment which was dominant in the 1970s and had quite a substantial impact on economic growth.

According to the above structural form, labour use is determined by real investment, real wages, and real GDP. Any increase in real wages or real GDP (statistically insignificant relationships due to high standard error) would reduce the amount of labour used by 0.21 per cent and 0.37 per cent respectively. On the

other hand, an increase in real investment by 1 per cent would increase labour use by 0.45 per cent.

As far as exports are concerned, there is a strong negative relationship with the exchange rate suggesting that a devaluation would have serious consequences on Turkish exports in the 1970s (although this was not what happened when Turkey devalued its currency during that period). In addition, as in the 1980s, industrial production is an important determinant of exports in the 1970s. A 1 per cent increase in industrial production would lead to a 1.96 per cent increase in exports. On the other hand, real imports are also affected by production in the manufacturing sector with a 0.25 per cent increase in the former for a 1 per cent increase in the latter. This result could be related to the dependence of Turkish producers on imported inputs in their production.

Inflation in Turkey during the 1970s was strongly related to the increase in real money supply according to equation 7 in the above model. A 1 per cent increase in RM2 would raise prices by 1.6 per cent (one should be cautious when interpreting this result because the statistical significance of the relationship is weak). The increase in money supply in Turkey was a regular policy followed by the government before 1980 to finance its public sector borrowing requirement and its five-year plans aimed at increasing the economic growth of Turkey (see equation 8 where a 1 per cent increase in real GDP is related to a 0.89 per cent increase in real M2).

Moreover, there was a strong relationship between RM2 and real credits in the 1970s which is not surprising. Before 1980, banks granted loans to investors (private and public), without due regard to inflationary pressures. In many cases

these banks referred to the Central Bank when they were short of liquidity.

The reduced form below shows the relationship between the exogenous variables and the dependent variables in the model which was not illustrated in the structural form completely i.e., the total effect taking place between the variables.

The reduced form equation $By = Ax + u$ of the structural form turned out to be, in matrix form and ignoring the error term, as follows:

$$\begin{pmatrix}
 1 & -0.89 & -10.9 & 0 & 0.54 & 0 & 0 & 0 & 0 & 0 & 0 \\
 0 & 1 & 1.17 & 0 & -0.04 & -0.95 & 0 & 0 & 0 & 0 & 0 \\
 0 & 0.37 & 1 & 0 & 0 & -0.45 & 0 & 0 & 0 & 0 & 0 \\
 -1.96 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\
 -0.25 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\
 0 & -1.42 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 1 & -1.6 & 0 & 0 & 0 \\
 0 & -0.89 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\
 0 & -2.19 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\
 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1.64 & 0 & 0 & 1
 \end{pmatrix}
 \begin{pmatrix}
 \ln(IP) \\
 \ln(RGDP) \\
 \ln(Labour) \\
 \ln(Exports) \\
 \ln(Rimports) \\
 \ln(RI) \\
 \ln(WPI) \\
 \ln(RM2) \\
 \ln(RQM2) \\
 \ln(Rdeposits) \\
 \ln(Rcredits)
 \end{pmatrix}
 =$$

$$\begin{pmatrix}
-170.2 & 0 & 0 & 0 & 0 & -0.79 & 0 \\
20.8 & 0 & 0 & 0 & 0 & 0 & 0 \\
18.9 & 0 & 0 & 0 & 0 & -0.22 & 0 \\
1.9 & 0 & 7.83 & -3.42 & 0 & 0.93 & 0 \\
5.54 & -0.1 & -5.0 & 0 & 0 & 0 & 0 \\
-8.2 & 0 & 0 & 0 & -0.02 & 0.92 & 0 \\
5.1 & 0.2 & 0 & 0.7 & 0 & 0 & 0 \\
-0.83 & 0 & 0 & -0.09 & 0 & 0 & -0.06 \\
1.64 & 0 & 0 & -1.0 & 0 & 0 & -1.27 \\
0.71 & 0 & 0 & 0 & 0 & 0.26 & 0.77 \\
1.65 & 0 & 0 & 0 & 0 & 0 & -0.43
\end{pmatrix}
\begin{pmatrix}
\textit{unity} \\
\ln(USinfl) \\
\ln(1+t) \\
\ln(Exchange) \\
RIRR \\
\ln(Rwages) \\
\ln(DIR)
\end{pmatrix}$$

Hence, the reduced form $y = B^{-1}Ax$ is, in matrix form:

$$\begin{pmatrix}
\ln(IP) \\
\ln(RGDP) \\
\ln(Labour) \\
\ln(Exports) \\
\ln(Rimports) \\
\ln(RI) \\
\ln(WPI) \\
\ln(RM2) \\
\ln(RQM2) \\
\ln(Rdeposits) \\
\ln(Rcredits)
\end{pmatrix}
=
\begin{pmatrix}
222.92 & 0.22 & 11.11 & 0 & 0.38 & -31.48 & 0 \\
68.13 & 0.05 & 2.59 & 0 & 0.14 & -9.69 & 0 \\
33.54 & 0.01 & 0.7 & 0 & 0.03 & -2.41 & 0 \\
438.82 & 0.44 & 29.61 & -3.42 & 0.74 & -60.77 & 0 \\
61.27 & -0.04 & -2.22 & 0 & 0.09 & -7.78 & 0 \\
88.55 & 0.07 & 3.68 & 0 & 0.18 & -12.85 & 0 \\
100.79 & 0.27 & 3.69 & 0.56 & 0.2 & -13.8 & -0.1 \\
59.81 & 0.05 & 2.31 & -0.09 & 0.12 & -8.63 & -0.06 \\
150.85 & 0.11 & 5.68 & -1.0 & 0.3 & -21.23 & -1.27 \\
0.71 & 0 & 0 & 0 & 0 & 0.26 & 0.77 \\
99.74 & 0.08 & 3.79 & -0.15 & 0.2 & -14.15 & -0.53
\end{pmatrix}
\begin{pmatrix}
\textit{unity} \\
\ln(USinfl) \\
\ln(1+t) \\
\ln(Exchange) \\
RIRR \\
\ln(Rwages) \\
\ln(DIR)
\end{pmatrix}$$

World inflation in the 1970s did not have a serious effect on industrial production in Turkey. The latter would increase by 0.22 per cent for every 1 per cent increase in US inflation. Moreover, exports would increase, possibly due to the increase in industrial production (see structural form) by about 0.44 per cent i.e., about the same amount estimated by the simultaneous equation system. On the other hand, imports would be marginally affected by a reduction equal to 0.04 per cent; however, the result is statistically insignificant. These findings show that as

world prices go up, Turkish products become more price competitive; therefore, leading to a rise in exports. Furthermore, there is a moderate but direct relationship, although statistically not different from zero, between world inflation and Turkish inflation. A rise by 1 per cent in the former would lead to a 0.27 per cent increase in the latter.

With regard to tariffs, an increase of 1 per cent would reduce real imports by 2.22 per cent which would increase the productivity of import-substitution industries by 11.11 per cent; thereby, raising exports by 29.61 per cent. The increase in productivity would require an increase in investment by 3.68 per cent; hence, increasing inflation (due to the increase in tariffs and the demand for domestic resources) by 3.69 per cent, real money supply by 2.31 per cent, and real credits by 3.79 per cent. The resulting increase in the demand for money to finance the increasing economic activity would increase real quasi-money supply by 5.68 per cent.

Any increase in the exchange rate in the 1970s would reduce exports by 3.42 per cent for a 1 per cent depreciation in the Turkish lira. This may be due to the increasing demand for domestic products; especially import substitutes, as the prices of imports increase dramatically due to the depreciation in the lira. This pressure on domestic production would reduce the amount available for exports depriving the country from the foreign exchange revenues it badly needed.

The major effect of a 1 per cent increase in the real international rate of return is on Turkish exports which would rise by 0.74 per cent. This result may be explained in two ways: first, the increase in RIRR would leave people in the international community richer; thus, increasing the demand for goods including

Turkish ones. A second explanation could be that an increase in RIRR may be an incentive to save more by buying cheaper products in which the price competitiveness of Turkish exports has an advantage.

An increase in real wages would have a negative impact on all variables under study except real deposits. A 1 per cent rise in real wages would reduce industrial production, exports, real investment, real quasi-money supply, real GDP, and inflation substantially. This result reflects the importance of the fixed wage policy adopted by Turkish governments before 1980. Although a rise in wages is likely to increase domestic demand and subsequently production and economic growth, it seems that the negative cost effect of such a move was crippling for the Turkish economy in the 1970s.

Finally, the fixed interest rate policy in Turkey before 1980 was quite effective in terms of attracting savings and inhibiting the demand for credits. On the other hand, any rise in interest rates by 1 per cent would reduce inflation by 0.1 per cent, quite a disastrous economic tool to fight the increase in prices at the time given Turkey's high inflation.

The coefficients with high standard of error should have been dropped from the structural form of the model but, as in the 1980s model, this was not done due to the theoretical importance of each variable in the above equations.

4.4 A Comparison between the 1970s and 1980s

Several changes occurred during the past two decades under scrutiny in the relationship between the dependent variables and independent variables included

in this study. Industrial production was found to have an important impact on exports in both decades, although it had a greater effect in the 1970s, with a minor effect on imports which was eroded further in the 1980s. Surprisingly, the exchange rate had a moderate effect on exports contrary to the theory and the findings of other researchers such as Dornbusch (in Dornbusch, R. and Helmers, L., 1988) who concluded that adjustments of the real exchange rates can, in some cases, yield fast growth in exports. On the other hand, Fry (1986) stated in his conclusion that the rapid recovery in exports would not have occurred without a radical reform of exchange rate policy. Also, Odekon (Nas, T. and Odekon, M., 1992) concluded that the rise in the real lending rates, real depreciation of the TL, and the value-added tax have all contributed to the high and persistent inflation in Turkey.

The exchange rate devaluation was a complementary instrument, rather than a major one, in determining the volume of Turkish exports; especially in the 1980s; a result that is supported by the findings of Baysan and Blitzer (in Aricanli, T. and Rodrik, D., 1990). They used data on sectoral exports, total subsidy rates, and real exchange rates for the period 1980-1984 and found that it was not possible to establish any statistically significant relationships among those variables. Variations in EERs do not seem to explain the sharp differences among sectors in export growth performance. Moreover, they pointed out that although devaluations raised the costs of production due to higher costs of many intermediates, marginal costs of Turkish firms actually declined in late 1980. This decline in costs may be due to the more efficient use of previously unutilised capacity. In addition, they stressed that the growth in manufactured exports did not stem from the es-

establishment of new export industries, but from existing capacity in industries that before had been producing mostly for the domestic market.

Krueger and Aktan (1992) estimated the relationship between the exchange rates and exports (for the period 1975-1989) and arrived at exactly the same coefficient (0.43) as in the above model. Thus their findings support the results of this research on that issue. However, the authors did not use the industrial production variable in their model which is a basic difference between the model in this study and their model. In addition, they believe that during the 1980-1984 period the rapid export growth in Turkey was accomplished largely out of existing excess capacity at the time. After 1984, real investment increased leading to an increase in the industrial capacity. This interpretation of the events in Turkey in the 1980s does not contradict the conclusions of this study where the emphasis is on the relationship between exports and industrial production disregarding the source of the latter whether it is excess capacity or an increase in investment. Hence, when Krueger and Aktan (1992) refer to industrial capacity (whether increased through more efficiency or investment) as one of the causes of the rise in exports in the 1980s, they are implicitly supporting the findings of the above model with regard to exports and industrial production.

Consequently, according to the results of this study which are supported by the findings of other researchers in the field, the growth in exports is not mainly a devaluation phenomenon. Exports growth was largely due to the increase in industrial production facilitated by factors such as export incentives, the existence of unutilised capacity, depressed domestic demand, and the availability of foreign exchange. Those factors, combined with a depreciated lira helped sharpen the

competitiveness of Turkish exporters in world markets especially in the early 1980s.

It is clear from the above structural form of the models that the relationships between real money supply and real credits declined in the 1980s in comparison with the 1970s. This may be due to the strict monetary policy followed by Turkey after 1980. The Turkish Central Bank, in the 1970s, used to finance many of the credits to Turkish companies mainly the state economic enterprises (SEEs); however, this practice diminished substantially after 1980 with the rationalisation of costs in most of those enterprises (OECD Economic Surveys, April 1980 and 1990/1991).

The determinants of inflation in Turkey changed their roles after economic liberalisation. World inflation, however, still has almost the same effect it used to have in the 1970s. Although, in the 1970s, RM2 had an important role in determining WPI followed by the exchange rate. This role changed in the 1980s with the exchange rate having the single most important effect on prices in Turkey with real money supply having a very minor impact. These results are supported by Conway's (Conway, P., 1987 and Nas, T. and Odekon, M., 1988) conclusions of his two studies that the devaluations after 1980 contributed heavily to the inflation rate. In addition, he believes that money supply growth has also been important (in Turkish inflation), although it had its greatest relative impact during the expansionary 1973-1977 period. Moreover, a World Bank study (World Bank, 1980) found that inflation in Turkey is not "purely a monetary phenomenon", adding that money supply does affect prices but there are some price changes which cannot be explained by past monetary expansion only. Furthermore, Krueger and Aktan (1992) also believe that the depreciation in the lira is leading to more inflation in

Turkey.

Other non-monetary (exogenous) events exert upward pressure on prices in Turkey such as the increase in import prices (represented in this study by US inflation) and increases in agricultural support prices for income policy reasons. In addition, Conway (1987) also views that the rise in the US-dollar price of imported inputs and final goods prices raised inflation in the 1980s. This rise in US inflation had a negative effect on exports, imports, and industrial production in the 1980s, while its effect was much milder in the 1970s. This may be due to the liberalisation of trade which left Turkey more exposed to any changes in the world markets.

The reduction in tariffs had a strong positive effect on inflation in comparison with the 1970s. This may be due to the higher flow of imported products which became more expensive after devaluation. On the other hand, exports and imports had high multipliers in the 1970s with respect to any change in tariffs, while in the last decade, these multipliers diminished substantially.

Finally, with respect to financial liberalisation, interest rates, deposits, and credits in Turkey, surprisingly had a more theoretically plausible relationship during the 1970s. Real deposits were more responsive to changes in the interest rates in the 1970s while real credits had almost the same multiplier but with an opposite sign after 1980.

4.5 Conclusion and Summary

It is quite surprising to have completely unexpected results with respect to the relation between exports and the exchange rate, commercial banks' deposits and

interest rates. Although the theory emphasises the relation between the exchange rate and exports, that proved to be moderate in the case of Turkey in the 1980s. As for the relation between money supply and inflation, this turned out to be weak with a strong influence mainly from the exchange rate on the latter. In addition, interest rates turned out to have a moderate effect on the volume of deposits while the theoretical (inverse) relationship between credits and interest rates existed in the 1970s and not after liberalisation.

Surprisingly, the exchange rate before 1980 had a weak effect on trade, while in the 1980s, industrial production was the major determinant of exports. It is believed that trade liberalisation, export incentives, and the exploitation of the industrial unutilised capacity (this factor existed mainly in the early 1980s) are important factors contributing to the increase in industrial production and; hence, exports. Furthermore, the exchange rate had a stronger effect on inflation after liberalisation than before it. Hence, the liberalisation of the exchange rate added to the inflationary pressures in Turkey. Moreover, money supply turned out to be directly affected by the economic growth of Turkey.

On the whole, the results seem to be mixed and it is difficult to judge which decade and; hence, which economic system was better for Turkey. But since the economy has been liberalised (after 1980) it has been exposed more to market forces both domestically and internationally, leading to better allocation of resources. Certainly, the trade balance has improved substantially and it is believed that the Turkish economy now is in a relatively better position despite the continuing problem of inflation and the depreciation in the lira.

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4.6 Appendix: Trade and Exchange Rates

The relationship between exports, imports, and industrial production was investigated in isolation of other variables using the Ordinary Least Squares method (OLS). The equations below were important in giving a notion about the relation between the different variables in the economy before going ahead with building the overall model presented in the chapter.

4.6.1 Exports

Table 4.1 demonstrates the econometric relationship between real exports, real exchange rates (RER), and real industrial production in the 1970s and the 1980s. During the fixed exchange rate period and with import-substitution policies in the 1970s, real exchange rate had a minor role in the determination of real exports.

Any one percent increase in RER would lead to only 0.11 percent increase in real exports. On the other hand, after the 1980 devaluation and the liberalisation of the exchange rate, the coefficient of RER increased by 0.08; thus, real exports would increase by a 0.19 ($0.11 + 0.08$) percent for any one percent increase in the real exchange rate.

There are two aspects related to the exchange rate result above that should be mentioned. First, there is a weak relation between RER and real exports, second the statistically insignificant (high standard of error) coefficients of RER suggest that the variable should be dropped.

Table 4.1: Determinants of Real Exports

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(REXPO)	A	1.56	0.70
	D	- 1.95	1.20
	ln(RIP)	0.47	0.16
	ln(DRIP)	0.46	0.19
	ln(RER)	0.11	0.13
	ln(DRER)	0.10	0.14

$R^2 = 0.97$, DW-statistic equal 2.92, Chi-square for: serial correlation (6.3), critical value is 3.84 at the 5% significance level.

n = 19 observations from 1972 to 1990.

A = intercept.

D = intercept dummy (0 for 1970s and 1 for 1980s).

REXPO = real exports.

RIP = real industrial production.

DRIP = real industrial production multiplied by the dummy variable.

RER = real exchange rate.

DRER = real exchange rate multiplied by the dummy variable.

Moreover, real industrial production seems to be the driving force behind any increase in real exports in Turkey according to table 4.1. During the decade of the 1970s, any one percent increase in real industrial production would lead to a 0.47 percent increase in real exports. However, after 1980 and with the export-oriented economic policies and the related trade liberalisation and export incentives, the impact of any one percent increase in real industrial production would lead to a 0.93 (0.47 + 0.46) percent increase in real exports i.e., almost double in comparison with the 1970s.

Table 4.2 shows the econometric relationship between real exports and real industrial production, excluding real exchange rate. The results are very significant despite excluding a theoretically important factor, such as the exchange rate.

Table 4.2: Determinants of Real Exports

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(REXPO)	A	1.05	0.40
	D	- 3.23	1.15
	ln(RIP)	0.65	0.17
	ln(DRIP)	0.88	0.25

$R^2 = 0.95$, DW-statistic equal 1.75, Chi-square for: serial correlation (0.02), critical value is 3.84 at the 5% significance level.

n = 20 observations from 1971 to 1990.

A = intercept.

D = intercept dummy (0 for 1970s and 1 for 1980s).

REXPO = real exports.

RIP = real industrial production.

DRIP = real industrial production multiplied by the dummy variable.

In table 4.2 there is a strong relationship between real industrial production and real exports in comparison with the relationship in table 4.1. Real exports in the 1970s would increase by 0.65 percent for every one percent increase in real industrial production. In the 1980s, the former would increase by 1.53 (0.65 + 0.88) percent for every one percent increase in the latter. This may explain the fast domination of industrial products in Turkish exports, after 1980, replacing the traditional dominant position of agriculture. Moreover, it is worth mentioning that the negative coefficient of the dummy variables in the above equations may

be largely due to the decrease in real exports due to the recession in the industrial countries after the 1979 increase in oil prices.

The increase in the impact of real industrial production on real exports could be attributed to the changing attitude with respect to exports after 1980 and abandoning the import-substitution policy which aimed most of Turkey's industrial production at the domestic market. Moreover, the liberalisation of trade which facilitated the imports of needed production-inputs and the existence of unutilised industrial capacity in addition to export incentives may be considered the major factors behind the increase in Turkish real exports since 1980.

Figures 4.1 and 4.2 support the findings of the model while contradicting the results of table 4.1 of a weak relationship between real exports and real exchange rate. Figure 4.1 shows that changes in exports over time are very similar to the fluctuations occurring in industrial production. On the other hand, figure 4.2 shows that the fluctuations in the exchange rate in Turkey are directly reflected in the performance of exports with no lags, thus justifying the drop of the lagged variables in the model and table 4.1 above. However, it is worth mentioning that the seemingly unrealistic increase in real exports in both figures may be due to the substantial increase in the exchange rate as noted in figure 4.2. The more than twofold increase in the exchange rate and the decline in the inflation rate from about 70% to 66% between 1989 and 1991 may be the main cause for the boost of the TL value of real exports.

4.6.2 Imports

Table 4.3 presents the different determinants of Turkish real imports in the

Figure 4.1: Changes in R. Exports & R. Industrial Production

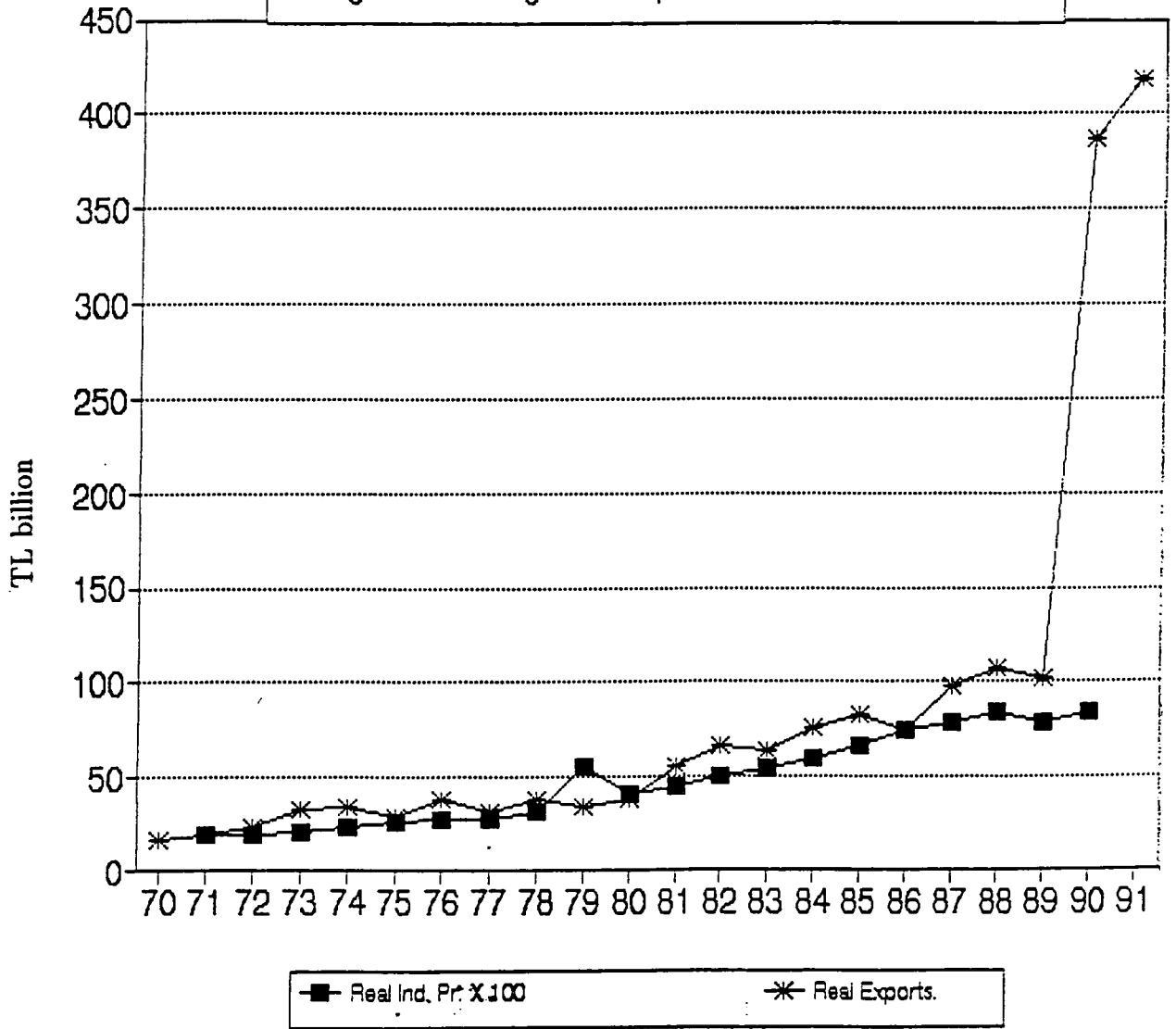


Figure 4.2: Changes in R. Exports & R. Exchange Rates

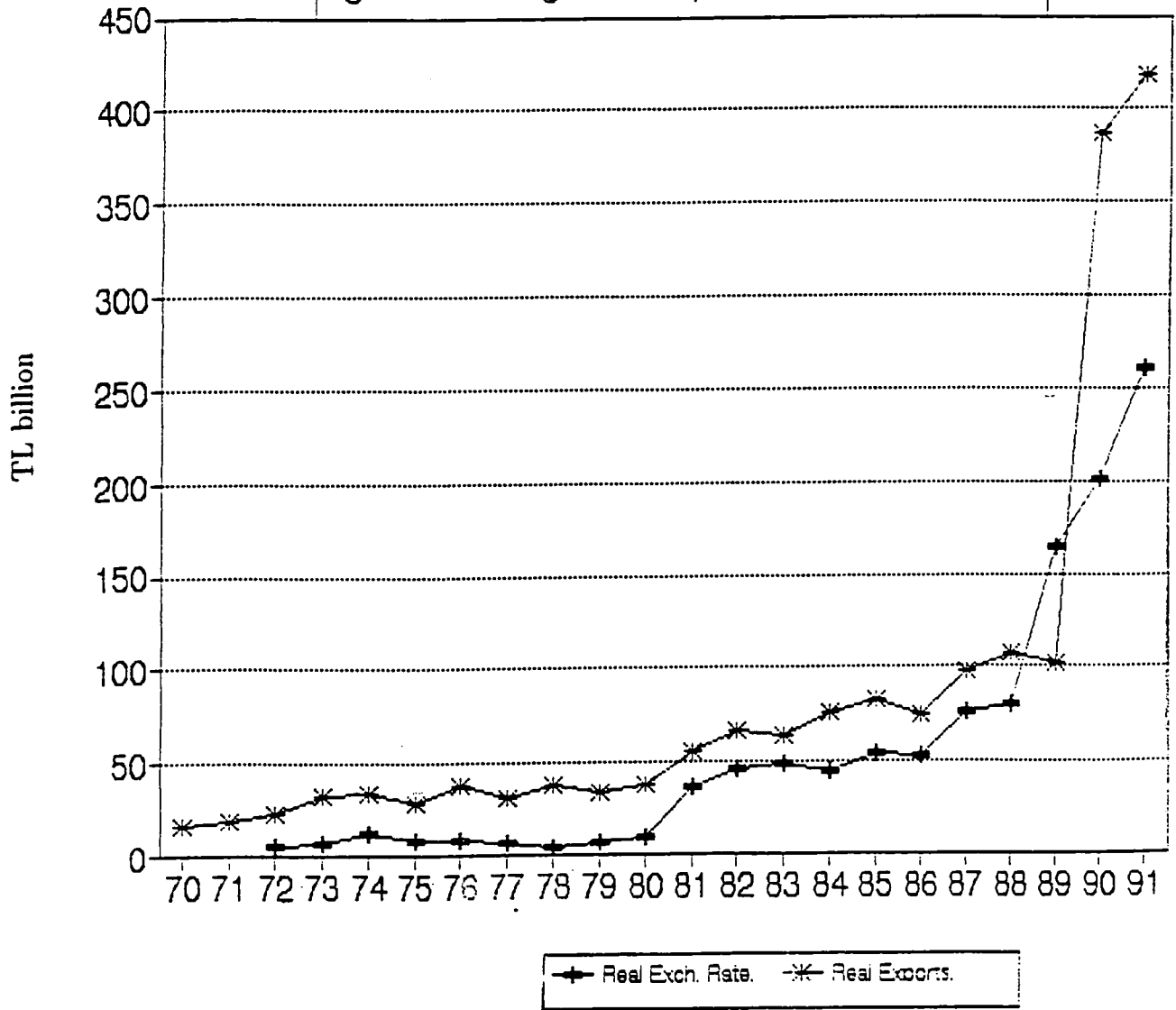


Table 4.3: Determinants of Real Imports

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(RIMPO)	A	2.88	0.93
	D	0.43	0.20
	ln(RER)	0.70	0.12
	ln(DRER)	- 0.50	0.20
	ln(RIP ₋₁)	0.39	0.19
	ln(DRIP ₋₁)	- 0.20	0.07
	ln(RCRED ₋₁)	1.16	0.24
	ln(DRCRED ₋₁)	- 1.06	0.25

$R^2 = 0.95$, DW-statistic equal 2.70, Chi-square for: serial correlation (3.47), critical value is 3.84 at the 5% significance level.

n = 19 observations from 1972 to 1990.

A = intercept.

D = intercept dummy (0 for 1970s and 1 for 1980s).

RIMPO = real imports.

RER = real exchange rate.

DRER = real exchange rate multiplied by the dummy variable.

RIP₋₁ = real industrial production lagged by one period.

DRIP₋₁ = one period lagged real industrial production multiplied by the dummy variable.

RCRED₋₁ = real credits from commercial banks lagged by one period.

DRCRED₋₁ = one period lagged real credits multiplied by the dummy variable.

past two decades. The real exchange rate, real industrial production, and real credits turned out to have an important influence on the volume of real imports in the 1970s. However, this influence faded after structural adjustment measures in 1980.

The Turkish exchange rate was overvalued throughout the decade of the 1970s, thus imports were underpriced (but tariffs were high on many products; especially final goods), while exports were overpriced. Under that policy, the econometric relationship in table 4.3 shows that any one percent change in real exchange rate would lead to a 0.7 percent change in real imports. Hence, a devaluation in the 1970s will only lead to more products being imported under the above mentioned fixed exchange rate system. However, in the 1980s, after the liberalisation of the exchange rate, with imports being more expensive due to continuous devaluations in the Turkish lira, real imports became much more elastic with respect to changes in the exchange rate. Any one percent increase/decrease in RER would lead to 0.20 (0.70 - 0.50) percent increase/decrease in real imports.

Another factor that worked side by side with the exchange rate in Turkey is real industrial production. In the 1970s, any increase in real industrial production by one percent would lead to an increase by 0.39 percent in real imports the following year. This relation could be explained on the basis that the industrial sector in Turkey relied on cheap (low tariff and overvalued exchange rate) production inputs and capital goods; especially in periods of abundant foreign exchange reserves.

However, after 1980, the liberalisation of the exchange rate made imported products more expensive which allowed Turkish manufacturers to compete in the field of intermediate and capital goods production. Thus, an increase in real in-

dustrial output by one percent would lead to an increase in real imports by 0.19 (0.39 - 0.20) percent the following year compared with a 0.39 percent increase in the 1970s. Hence, Turkey managed to achieve an import-substitution target by liberalisation; although, ironically, it tried to avoid the latter for decades in order to attain the former.

The third factor influencing real imports is real credits. In the 1970s, any one percent increase in real credits would lead to a 1.16 percent increase in real imports the following year. However, there was a dramatic change after 1980 with only 0.10 (1.16 - 1.06) percent change in real imports for every one percent change in real credits the previous year.

The fact that Turkish industrialists could get cheap loans (low interest rates) from banks and the ability to buy cheap imports (low tariffs and overvalued exchange rate) during the 1970s meant that those industrialists could easily import their needed intermediate and capital goods at low costs; thus, bolstering the import bill and leading to the quite big coefficient for real credits in relation to real imports.

Meanwhile, the adjustment programme in 1980 which liberalised the exchange rate and interest rates increased the prices of imports and the cost of borrowing. The result was less imports through loans according to table 4.3 and the development of domestic import-substitution industries facilitated by its increasing competitiveness due to the higher prices of imports.

Moreover, table 4.4 shows that a one period lagged real imports in the 1970s had a large effect on real industrial production the following year. A one percent

increase in real imports in the 1970s would lead to a 0.65 percent increase in real industrial production the following year. This could be attributed to the great dependence of Turkish industries on imported production inputs. However, the economic liberalisation after 1980 reduced the reliance of manufacturers on imported inputs by producing some of those inputs domestically, as mentioned above, or due to the increase in their prices after devaluation which resulted in more efficient manufacturing. After 1980, a one percent increase in real imports would increase real industrial production by 0.25 (0.65 - 0.40) percent.

As to the relation between RER and real industrial production, it is clear from table 4.4 that any one percent increase in the real exchange rate (due to devaluation or inflation) would decrease real industrial output by 0.73 percent. This is true since any devaluation or rise in prices would increase the costs of industrial production.

Meanwhile, with the liberalisation of prices and an export-oriented policy, the real exchange rate had a small positive effect in the 1980s (although the change was dramatic in comparison with the 1970s). A one percent change in RER would lead to a 0.25 (0.98 - 0.73) percent change in real industrial production. This result could be explained on the basis that a devaluation would lead to more competitiveness at home and abroad; hence, stimulating production.

Table 4.4: Determinants of Real Industrial Production

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(RIP)	A	- 2.60	0.70
	D	0.28	0.17
	ln(RIMPO ₋₁)	0.65	0.18
	ln(DRIMPO ₋₁)	- 0.40	0.13
	ln(RER ₋₁)	- 0.73	0.21
	ln(DRER ₋₁)	0.98	0.23

$R^2 = 0.92$, DW-statistic equal 1.73, Chi-square for: serial correlation (0.46), critical value is 3.84 at the 5% significance level.

n = 18 observations from 1973 to 1990.

A = intercept.

D = intercept dummy (0 for 1970s and 1 for 1980s).

RIP = real industrial production.

RIMPO₋₁ = real imports lagged by one period.

DRIMPO₋₁ = one period lagged real imports multiplied by the dummy variable.

RER₋₁ = real exchange rate lagged by one period.

DRER₋₁ = one period lagged real exchange rate multiplied by the dummy variable.

From the above results, one can say that the exchange rate theories related to structural adjustment were partially true in Turkey. The real exchange rate had a weak econometric relation with exports contrary to the theory which suggests more competitiveness of domestically produced goods in the world market with every devaluation. The reason behind the increase in Turkish exports since 1980 proved to be real industrial production. Moreover, in an attempt to test whether RER is indirectly related to exports through industrial production, the result was a weak relationship between the two variables.

On the other hand, real exchange rate proved to have a strong inverse econometric relationship with real imports which supports the theory. In addition, the way real credits used to be spent in the 1970s seem to have changed. Those are being spent presumably on productive projects to increase industrial production rather than purchasing imports which was the case before 1980. Furthermore, real imports turned out to have a humble impact on industrial production in the last decade compared to a strong relation in the 1970s.

Real industrial production which is the main reason for the increase in export growth in Turkey, according to this research, is believed to be accompanied by other factors that helped achieve the dramatic export increase since 1980. These are mainly: the use of previously unutilised capacity, trade liberalisation, and the increase in export incentives; unfortunately, the impact of these factors could not be studied econometrically due to the lack of data.

Chapter V

Turkish Manufacturing in the 1980s: The Textile Industry

5.1 Introduction

Since the beginning of 1980, and with the implementation of its adjustment programme, Turkey adopted an export-oriented industrial drive aided mainly by its unutilised industrial capacity at the time and the competitiveness of its depreciated currency.

Aiming to be “Japan of the Middle East”, Turkey concentrated its efforts on developing its industrial capacity. The industry share in GNP rose from 25% to 29% between 1980 and 1990 (Economist Intelligence Unit, 1992-93). This phenomenon was reflected in exports as exports of the manufacturing sector rose from 35.1% in 1979 to about 77% in 1991 (OECD, 1980 and 1992). However, it is worth mentioning that the official Turkish definition of manufactured goods is quite loose and includes items such as processed agricultural goods. Therefore, one should be careful when interpreting figures related to production in the manufacturing sector in Turkey.

Turkish exports are of particular importance in this study because of their spectacular success (from US\$ 2,261 million in 1979 to US\$ 13,598 million in 1991) since the launching of the adjustment programme in 1980 where they increased by about US\$ 900 million annually. On the other hand, the whole “success” of the adjustment programme may hinge on the continuing flow of Turkish exports

to the world markets which will prevent the occurrence of any foreign exchange bottlenecks like the ones Turkey used to have in past decades.

This chapter will deal with Turkish manufactured products in general and Turkish textile industry in particular. In addition, Turkey's export markets and the role of export incentives in promoting manufactured exports will be discussed.

5.2 Turkish Industry

Turkey's share in world exports increased substantially in the last decade; especially in chemicals, iron and steel, and machines and transport equipment. Table 5.1 shows the rise in the ratios of selected Turkish exports to world exports from 1979 to 1988. It is worth mentioning that not all products rose by the same amount and that agricultural exports showed the slowest growth during the period under study. Moreover, textiles exports almost tripled their share, chemicals jumped from a share of 0.02 per cent to 0.38 per cent, the iron and steel industry had a great rise from 0.04 per cent to 1.37 per cent, while the machines and transport equipment industries had the highest leap from 0.001 per cent to 0.07 per cent. The rise in Turkey's share in world exports; especially in the exports of heavy industries, demonstrates that Turkey has the potential to become an advanced industrial country.

Although some might argue that the rise in Turkish exports, mainly heavy industry, was due to the slackening demand at home; especially at the beginning of the 1980s, the figures in table 5.2 refute this argument.

Table 5.2 shows the annual percentage change in Turkish industrial produc-

Table 5.1: Ratios (%) of Selected Turkish Exports to World Exports by Commodity Group

SITC (Rev. 2 & 3)	Commodity Group	1979*			1988*		
		World	Turkey	Ratio	World	Turkey	Ratio
0, 1	Food and live animals, beverages, and Tobacco	173,522	1,150	0.66	255,946	2,761	1.08
041 - 045	Cereals and cereal preparations	29,498	90	0.30	32,159	237	0.74
26 + 65 + 84	Textiles and clothings	101,429	686	0.68	203,974	3,950	1.94
5	Chemicals	125,763	24	0.02	252,713	951	0.38
67	Iron and steel	70,728	29	0.04	98,468	1,345	1.37
7	Machines and transport equipment	440,464	44	0.001	994,436	748	0.07

(*) World and Turkey figures are in million US dollars.

Source: Yearbook of International Trade Statistics, 1980 and 1988.

Table 5.2: Annual Percentage Change of Industrial Production (weighted by value-added)

	Textiles			Chemicals			Iron & Steel			Machinery*			Transport Equip.		
	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T
1982	3.7	- 1.9	- 1.0	- 2.6	9.4	3.1	16.6	15.6	16.4	38.2	- 8.7	2.0	-	23.2	23.2
1983	9.8	11.2	10.8	25.2	16.8	21.2	22.3	20.7	22.2	18.5	5.9	9.9	-	26.3	26.3
1984	4.7	10.1	9.3	1.5	5.4	3.5	22.6	20.8	21.1	2.1	8.7	6.5	-	6.5	6.5
1985	- 12.9	10.7	6.9	1.3	8.8	5.2	6.8	12.2	9.0	- 10.8	- 9.1	- 9.5	-	4.7	4.7
1986	7.6	11.5	10.0	45.1	12.7	27.6	19.9	26.6	22.9	- 16.1	8.7	0.6	-	2.0	2.0
1987	19.1	8.0	9.5	34.7	14.4	21.5	11.2	21.1	16.8	48.6	17.9	22.2	- 7.5	7.1	5.9
1988	- 7.6	5.4	3.5	3.3	- 8.9	- 4.3	2.3	5.0	4.0	- 33.6	- 4.2	- 9.2	- 34.3	3.1	0.1
1989	17.1	7.6	4.5	5.1	- 4.2	- 0.3	- 22.1	9.9	- 3.0	- 12.8	- 2.7	- 3.9	10.9	- 9.1	- 8.0
1990	20.3	0.4	2.4	- 3.9	9.8	3.9	42.7	6.0	17.8	41.7	21.2	23.5	9.8	41.9	40
1991	26	- 6.9	- 9.1	- 7.0	- 2.6	- 4.5	- 10.0	- 2.5	- 5.4	- 21.2	15.3	10.7	- 1.9	9.8	9.2

(*) Except electrical machinery.

Pu = Public sector.

Pr = Private sector.

Source: State Institute of Statistics, Industrial Production Indexes, 1990 (IV) and 1992 (I).

tion in selected sectors. The figures show quite high annual increases with textiles having a relatively lower growth rate. The high increase in the output of heavy industry sectors (iron and steel, and machinery and transport equipment) and chemicals shows the determination of the Turkish government to develop the industrial sector with an orientation towards heavy industrialisation. This strategy becomes very clear from the growth figures of Turkey's gross fixed capital formation in machinery and equipment which reached 11.7% of GDP in 1987. This is considered to be among the highest in the OECD countries (OECD, 1992).

On the other hand, Turkey achieved high growth rates in heavy industry both in terms of productivity and exports and although the country could not be classified as industrial by European standards, it achieved substantial progress in that field in comparison with the late 1970s. Turkish exports of chemicals, iron and steel, and machinery and transport equipment achieved a remarkable increase by 1991 compared to the figures of 1979. Table 5.3 shows that textiles exports increased from US\$ 378 million in 1979 to US\$ 4,328 million in 1991, iron and steel exports also increased from US\$ 31 million in 1979 to US\$ 1,452 million in 1991. Therefore, one can say that Turkey's export-oriented industrial drive is paying off with textiles as the spearhead of Turkish exports. In addition, other heavy industry products proved to be important in supporting the Turkish trade balance.

Table 5.3: Turkish Imports and Exports of Selected Products (US\$ million)

	1979		1991	
	Imports	Exports	Imports	Exports
Textiles	46	378	557	4,328
Chemicals	524	23	2,150	464
Iron and Steel	345	31	2,011	1,452
Machinery	903	18	3,756	265

Source: OECD, 1992.

5.2.1 Ownership

The state's economic policy in Turkey represented by etatism i.e., state intervention in economic affairs, led to the establishment of the state economic enterprises (SEEs) which were sharing the production of almost every commodity with the private sector. However, after 1980, the role of the public sector diminished after the privatisation of some SEEs and the expansion of the private sector as a response to the government's packages of incentives to investors and exporters.

In 1978, the public sector share of industrial output was about 30% (table 5.4) employing about one third of the industrial labour force and dominating the tobacco industry (91.8%) with large shares in food (34.2%), beverages (56%), paper (50.2%), chemicals (43.7%), iron and steel (48.9%), and basic metals (41.6%) industries. However, with the new economic trend and due to the inefficiencies and over-manning, the public sector share diminished in 1989 to about 23% of total industrial output with, still, a major domination in the tobacco industry (75.9%) and a large share in the beverages (48.1%), paper (41.7%), chemicals (50.3%), iron

Table 5.4: Shares of the Public Sector in Industrial Output (TL billion)

	1978			1989		
	Public	Private*	% ^a	Public	Private**	% ^a
Food manufacturing	33.1	63.6	34.2	3,711	11,219	24.8
Beverages	6.24	4.9	56	1,053	1,136	48.1
Tobacco	27	2.4	91.8	2,601	825.7	75.9
Textiles	10.3	73.8	12.25	1,268	12,414	9.3
Wearing apparel	0.1	4.73	2.07	66.4	4,811	1.4
Fur & leather	-	2.25	-	-	419.5	-
Footwear	0.7	1.3	35	87.3	196.8	30.7
Wood & cork	2.5	5.75	30.3	325.8	599.1	35.2
Furniture	0.08	1.25	6.01	-	291.1	-
Paper	5.97	5.92	50.2	980.2	1,368	41.7
Printing & publishing	0.52	5.5	8.6	115.7	1,072	9.74
Chemicals	12.3	15.8	43.7	3,582	3,535	50.3
Petroleum refineries	0.62	-	-	13,513	-	-
Glass	-	5.43	-	24.4	1,450	1.6
Rubber	-	10.2	-	-	1,703	-
Iron & steel	23.9	24.9	48.9	4,133	8,064	33.9
Basic metals	4.7	6.6	41.6	887	2,143	29.3
Metal products	3.2	20.5	13.5	107	3,089	3.3
Machinery	9.3	24	27.9	500	3,828	11.5
Electrical machinery	0.47	25.7	1.8	51	4,638	1.1
Transport Equipment	5.6	30.5	15.5	477.3	5,714	7.7
Scientific Equip.	-	0.5	-	33.3	216	13.3
Other products	0.22	1.8	10.9	8.7	251.7	3.3
Av. Share of pu. sect.			27.9			22.74

(*) Establishments where 10 or more persons are engaged.

(**) Establishments where 25 or more persons are engaged.

(a) Percentage share of the public sector (own calculation).

(b) for 1987.

Source: State Institute of Statistics.

and steel (33.9%), and wood and cork (35.2%) industries.

The Turkish private manufacturing sector is characterised, with some exceptions, by small (less than 50 workers) and medium-scale establishments (50-200 workers). By contrast, large establishments dominate the public sector in general, where those establishments are roughly ten times the size of an average private manufacturing firm (World Bank, 1982).

From the above mentioned, it is clear that the private manufacturing sector is more dominant and relatively efficient; therefore it is necessary to shed some light on two issues. First, the financial structure for the private manufacturing firms and second, the capacity utilisation in those firms.

5.2.2 Financial Structure of Turkish Private Manufacturing Firms

Turkey's comparative advantage in low labour cost and low value-added products compared to other European countries gives its industrial products an edge of competitiveness, whether in the domestic market or abroad. This fact is reflected in the higher profits earned by private firms in Turkey compared to those in other European countries (table 5.5).

Moreover, total financial assets of Turkish firms compared to their fixed assets have been rising leaving the ratios for Portugal and Spain at lower levels. This suggests that the financial position of Turkish firms is better than the position of their Spanish or Portuguese counterparts.

On the other hand, the indebtedness of Turkish firms has been declining since 1982, and it reached almost the levels of indebtedness of German and Italian firms.

Table 5.5: International Comparisons of Some Financial Indicators
for Private Manufacturing Firms (% of total sales)

	Turkey			1987			
	1986	1987	1988	Portugal	Spain	Italy	Germany
Income Statement							
Value-added	14.7	17.1	17.4	21.9	26.9	24.5	27.9
Labour costs	6.4	5.9	6.3	14.3	20.3	18.0	21.9
Operating profits	8.3	11.2	11.1	7.6	6.7	6.5	6.0
Financial revenues ¹	2.6	2.6	3.3	n.a.	1.7	1.3	2.0
Financial costs ²	2.5	1.8	3.4	5.2	4.2	3.4	2.8
Corporate taxes	2.9	3.8	3.5	1.0	1.5	2.1	1.6
Net profits	5.7	8.5	8.1	3.6	2.9	2.7	2.8
Exports	17.4	16.5	20.6	n.a.	n.a.	n.a.	n.a.
Retention ratio ³	56.0	56.3	63.9	n.a.	n.a.	n.a.	n.a.
Assets							
Total fixed assets	27.1	22.1	19.6	33.6	29.6	16.9	14.1
Total financial assets	5.5	4.8	4.5	4.9	5.9	7.1	9.2
Financial / fixed assets	20.1	21.6	22.9	14.5	19.8	42.0	65.6
Liabilities							
Total financial debt	37.8	29.1	25.9	34.6	27.3	21.0	23.1
ST / LT debt*	128.9	111.2	120.4	84.8	97.7	109.7	164.4
Bonds / LT debt	9.4	15.9	6.7	n.a.	n.a.	n.a.	n.a.

(1) Dividends received from participations plus other revenues.

(2) Other expenses.

(3) Dividends to be distributed as per cent of profits.

(*) Short-term / Long-term debt.

Source: OECD, 1990/1991.

However, the Turkish firms' borrowings are characterised by a relatively higher share of short-term debts compared to other European firms (table 5.5) , with the exception of Germany.

Finally, given the low share of bonds in long-term debts it seems that Turkish firms are having difficulties in raising funds by issuing bonds. This may be due to the inefficiency of the Turkish capital market and the higher yields on other kinds of investments, whether government securities or commercial banks' interest rates.

Summarising, despite the marked improvements in the financial position and profitability of Turkish firms, these firms remain vulnerable to changes in the costs of borrowing and labour which may affect their competitiveness.

5.2.3 Capacity Utilisation in the Private Manufacturing Sector

In 1980, Turkish manufacturing suffered from shortages of imported inputs caused by the scarcity of foreign exchange, depressed domestic demand, labour disputes (affecting especially textiles, glass, and metal industries), power shortages, and the scarcity of funds. These factors led to under-utilisation of the productive capacity where only 40.5% of that capacity was used (World bank, 1982).

However, towards the end of the 1980s and with the liberalisation measures taking effect, most of the above mentioned causes for the under-utilisation of the productive capacity ceased to exist, leading to the exploitation of more than 80% of that capacity in some sectors.

The average capacity utilisation in the first two quarters of 1992 was 74.9% (table 5.6) which is relatively high. However, this utilisation reached 88%, 80.4%,

and 79.7% in the soil products, basic metals, and textile (including clothing and leather) industries respectively. On the other hand, some industries such as the machinery and transport equipment still has a relatively low utilisation of their productive capacity, suggesting that it is still inefficient compared to other sectors. The lower capacity utilisation in 1991 in comparison with 1988 may be due to the Gulf crisis and its negative impact on economic activity; especially at the beginning of the year.

Table 5.6 : Capacity Utilisation in the Private Sector (%)

	1986	1987	1988	1989	1990	1991	1992*
Food, beverages, tobacco	73.7	74.1	73.9	-	-	72.4	67.3
Textiles, clothing, leather	78.3	81.9	82.1	-	-	76.1	79.7
Forestry products	62.8	89.7	72.2	-	-	69	77.5
Paper, printing	77.4	83.4	80.6	-	-	77.3	73.2
Chemicals, petroleum products, rubber	70.6	75.7	75.2	-	-	73.2	73.6
Soil products	80.2	82.9	82.5	-	-	81.8	88
Basic metals	72.7	71.4	73.2	-	-	77.6	80.4
Machinery & Transp. equip.	69.4	71.2	66.6	-	-	67	73.4
Others	65.2	68.9	61.8	-	-	55	62.8
Total	72.7	75.2	74.3	-	-	73.3	74.9

Source: Istanbul Chamber of Industry and Yapi Kredi Economic Review (January 1992).

(*) Average of first two quarters.

Furthermore, the State Institute of Statistics completed a survey on capacity utilisation in the manufacturing sector in Turkey based on data obtained from 2,500 major industrial establishments. According to the survey, the ratios for

reasons given by industries for operating below full capacity in the last quarter of 1991 were (Briefing, 1991): inadequate domestic demand (55.5%), inadequate external demand (16.3%), problems related to labour (3.8%), financial difficulties (4.6%), insufficient domestic raw material (3.8%), and insufficient imported raw material (1.3%).

5.2.4 Wages in the Manufacturing Sector

There is no doubt that in the last two years there has been a tremendous change in wages, Turkey's comparative advantage in manufacturing. Between 1988 and 1991, wages in the private sector jumped from TL 16,423 per day to TL 170,593 (table 5.7), in the public sector, wages rose from TL 9,226 per day in 1988 to TL 113,844 in 1991. On the whole, this led to a 50.6% rise in real wages in the private sector and 56.6% rise in the public sector in 1991 in comparison with 1990.

However, the huge rise in wages in comparison with 1979, when the average daily wage was about TL 282 per day, may affect Turkey's comparative advantage in the long-run and hence the competitiveness of its exports. On the other hand, it should be mentioned that official wage statistics may be an inappropriate indicator for the rise in total labour incomes as they refer to wage settlements of unionised workers which cover only about two-fifths of employment (OECD, 1992).

Estimates of the Istanbul Chamber of Industry indicate that the share of labour costs in the net value-added of the largest 500 firms in Turkey decreased from about one half at the beginning of the 1980s to one third in 1988; hence, labour costs became less important than interest payments. But with the wage increases in the last two years, labour costs have accounted for about 60% of the firms' net

Table 5.7: Change in Wages in Turkey

	TL per day						% Change over previous year				
	1979	1988	1989	1990	1991*		1979	1988	1989	1990	1991*
Nominal Wages											
Av. Private sector ¹	239.6	16,423	36,577	68,237	170,593		32.1	66.8	122	86.6	150
Av. public sector ²	323	9,226	22,234	43,786	113,844		29.1	49.4	141	101.8	160
Legal minimum wage ³	-	3,337	5,575	10,125	19,175		-	73.1	67.1	81.6	89.4
Real Wages⁴											
Av. private sector	-	-	-	-	-		- 21.0	- 4.9	31.3	16.4	50.6
Av. public sector	-	-	-	-	-		- 19.2	- 14.8	42.1	25.9	56.6
Legal minimum wage	-	-	-	-	-		-	- 1.3	- 1.6	13.3	14.1

(*) Provisional.

(1) Wage plus social benefits, including social security premiums, excluding other non-cash benefits.

(2) Wage plus social benefits, excluding social security premiums and other non-cash benefits.

(3) Weighted annual averages for industry and services.

(4) Nominal wages deflated by the general consumer price index of the State Institute of Statistics.

Source: OECD, March 1981, 1990/1991, and 1992.

value-added in 1990, substantially more than interest payments (OECD, 1992). Therefore, without an exchange rate devaluation or a decline in prices, Turkey may lose its competitiveness in the world market leading to detrimental effects at home. This may bring the "success" of the 1980 adjustment programme to a halt.

5.2.5 Problems Facing Turkish Industry

Turkish industry suffers from the uneconomic small size of establishments; especially in the textiles sector (table 5.8). This problem goes back in origin to the import-substitution policy implemented before 1980 which allowed such establishments to exist in a protected domestic market.

Another problem is the lack of expenditure on research and development (R & D) in most firms. The share of gross domestic expenditure on R & D in GNP declined from 0.76 in 1983 to 0.54 in 1987 ranking Turkey below all other OECD countries for whom data are available. However, in October 1989, Turkey through its newly created High Council of Science and Technology decided to establish a Science and Technology Fund whose resources will be used to promote industrial R & D (OECD, 1990/1991).

Moreover, other problems still face Turkish manufacturing although attempts are being made to solve them. These problems include inadequate facilities for labour training, deficient technical and management methods, out-of-date machinery, marketing problems, and the level of technology. However, not all these problems exist in the same sector or establishment. Their weight and existence varies from one sector to another and from one establishment to another.

5.3 The Textile Industry

From the above tables (tables 5.1, 5.2, and 5.3) and comments, there is no doubt that the textiles industry is the engine of growth of Turkish exports, although other industries are growing rapidly. In 1991, the textiles share in total exports rose to 31.8% compared to 19.1% in 1979. However, in value terms, textiles and clothing exports rose more than tenfold from US\$ 377.6 million in 1979 to US\$ 4,328 million in 1991. Thus, it is important to shed some light on this sector in particular due to its weight in the Turkish economy and the potential it has for the development of the country.

Table 5.8 showed that the textile sector was by far the largest manufacturing sector in terms of value-added and the number of people employed and it was considered the second largest sector, after food manufacturing, in terms of output, and the third with respect to the number of establishments involved. As mentioned earlier, the textiles sector has quite a large number of small establishments (employing between 1 and 9 persons) involved in production. On the other hand, the textile sector grew by about 50% in terms of the number of establishments since the beginning of the adjustment programme. In 1978, the total number of medium and large establishments in the textile sector was 942 establishment employing 194,244 persons; however, by 1988 the number of establishments rose to 1,369 employing 183,952 persons. Thus, despite almost a 50% rise in the number of productive units involved in textiles, the number of people employed in those units declined by about 10,000 person suggesting that before 1980, the firms were over-manned, inefficient, and extremely labour intensive. However, the state of the textile sector now, although better than it was in the 1970s, is still below its potential level.

Table 5.8: Size and Production of Establishments in Some Industrial Sectors

	Establishments			Employees			Input*			Output*			Value-added*		
	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
Food	19,482	1,323	801	37,711	17,367	117,631	247.2	177.4	1681.7	355.8	215.9	2,189.7	108.6	48.5	508.0
Tobacco	-	3	50	-	47	43,275	-	3.45	218.9	-	6.07	677	-	2.62	458.1
Textiles	15,881	657	712	19,291	9,621	174,331	138	117.5	1203.9	169.2	146.7	1876.7	32.8	29.2	672.8
Wearing apparel ^a	30,720	526	311	32,580	7,761	28,457	80.2	41.4	199.7	163.3	57.3	276.1	83.1	15.9	76.4
Fur & leather	2,558	137	73	3,107	2,089	4,469	21.6	19.1	47.3	32.2	23.9	66.5	10.6	4.8	19.2
Footwear	9,429	94	40	14,406	1,269	5,300	38.5	4.5	25.4	68.8	6.5	37.2	30.3	1.9	11.7
Chemicals	156	39	82	468	637	32,167	5.1	8.8	720	7.4	11.2	958.4	2.3	2.4	238.4
Iron & steel	1,610	114	203	3,640	1,680	56,427	59.7	19.6	1182.8	85.9	22.6	1,566	26.2	3.0	383.2
Machinery ^b	4,100	415	322	7,368	6,154	49,105	34.0	29.5	508.6	54.1	42.5	746.5	20.1	13.0	237.9
Transport equip.	3,322	227	211	6,862	3,504	55,387	38.8	16.1	568.6	57.6	24.3	847.3	18.8	8.2	278.7

(*) TL billion.

(a) Except footwear.

(b) Except electrical machinery.

S = small establishments where 1-9 persons are engaged.

M = medium establishments where 10-24 persons are engaged.

L = large establishments where 25 persons or more are engaged.

Source: State Institute of Statistics, 1985 general census of industry and business establishments.

The Financial Times reported from Turkey on the 16th of December, 1987 and November 16, 1992 that: much of the machinery used in the textile industry is out-of-date. More than 90% of spinning mills and 95% of weaving plants are over ten years old, compared to figures of 40% and 50% for West Germany. Therefore there is a need for investment on a large scale (about US\$ 6 billion) over the next five years. Recently, imports of capital goods increased by 34% which is a sign of an increase in investment in the manufacturing sector including textiles.

Moreover, the Turkish textile plants have lower productivity per worker, compared to their European counterparts, presumably because they are less capital-intensive. On the other hand, Turkish manufacturers use about 80% of their productive capacity on average (see table 5.6) which is considered quite high. In addition, the Turkish industry has low labour costs and a realistic value of the the lira which outweigh the deficiencies in the sector thus rendering its products more competitive abroad.

In what follows, an analysis of the textile industry will be carried out according to its subsectors concentrating mainly on the cotton and wool industries.

5.3.1 Textiles Subsectors in Turkey

The Turkish textile industry is divided into four main sectors: yarn, fabrics, ready-made clothes, and carpets. Each one of these sectors is divided into subsectors depending either on the material used in manufacturing (e.g., cotton, wool, ...etc.) or the method of manufacturing (e.g., spinning, weaving, ...etc.). Table 5.9 shows the different production figures for every sector (except ready-made clothes, due to the unavailability of the data). It is clear that cotton is the spearhead

of Turkish yarn and fabric production while synthetic fibre production is gaining momentum; especially in fabrics.

Table 5.9: Yarns, Fabrics, and Carpets Production in Turkey

	1986	1987	1988	1989	1990
Yarn ('000 tons)					
Cotton	319.3	356.2	335	320	276.5
Wool	47.5	49.5	56.6	52.9	63.7
Man-made (synthetic)	-	73	68	70	-
Fabrics (million meters)					
Cotton	486	567.9	580	550.2	578.4
Wool	22.1	22.6	21.7	21.2	24.3
Man-made (synthetics)	-	114	167	135	-
Carpets ('000 m²)	12,968	6,421	7,982	9,182	11,010

Source: State Institute of Statistics.

In what follows an analysis of the different textile subsectors will be carried out concentrating mainly on the deficiencies of those subsectors. However, this analysis should not mislead the reader into understanding that the textile industry in Turkey is uncompetitive. On the contrary, the deficiencies mentioned, if overcome, would lead to a full exploitation of Turkey's potential in the textiles sector. Meanwhile, the industry (mainly large firms) remains extremely competitive to the extent where the EC had to impose quotas on Turkish products in order to protect European textile companies. The factors leading to Turkish competitiveness are considered to be low labour costs, low input costs (mainly cotton and wool), the

depreciating lira, and available unutilised industrial capacity especially in the early 1980s.

5.3.1.1 Cotton Spinning

Cotton spinning is considered the backbone of the textile sector and by far the most developed subsector in the industry. Most of the productive capacity in this segment was developed through previous five-years plans, mainly in the 1970s. However, the success of this sector and its high profitability after 1980 initiated more investment, both public and private.

As to international competitiveness, the majority of Turkish spinning plants have satisfactory capacity utilisation but the very large spinning plants still need to produce on an economies of scale basis. This combined with their slower spinning speeds (compared to their European counterparts) and the high finance costs, increases the amount of lost production.

The productivity performance of some cotton spinners is below international standards, and labour productivity (in man-hours per ton) is lower than the European standards by about a factor of two to three. However, this is not the case in all plants, as productivity values differ from one plant to another with the best producers achieving European productivity levels. Machine productivity is also lower in Turkey due to lower speeds and less machine hours per year (6,750 hour/year). But despite these deficiencies which hinder Turkey from fully exploiting its resources, the Turkish spinning costs remain lower than those in Europe although Turkey has high energy costs, low labour productivity, and high finance costs. This competitiveness is mainly due to low labour costs and low domestic

cotton prices.

There are two technologies in cotton spinning: the traditional ring and the newer open-end (rotor). Open-end yarn is cheaper, more uniform, and can use lower quality raw materials while ring spun yarn has higher tensile strength and uses less energy. European countries adopted the former technology in varying degrees, while Turkey is still at a low stage with respect to this technology.

Turkey's major markets for cotton yarn could be divided into three segments: the first segment constitutes about 15% of the customers requiring combed yarn, the second segment comprises about 45% of the market who are ready to pay a premium of 10 to 20% for ring-spun carded yarn over open-end, and finally customers who are indifferent to the type of yarn and unwilling to pay a premium for ring-spun yarn. The latter constitute about 40% of the market. However, Turkey has been traditionally strong in producing ring spun yarn, but the new weaving technologies in Europe has been capable of reducing the dependence on the ring spun yarn characteristics; hence, making it possible to use the cheaper European open-end yarn. Therefore, unless Turkey adopts the new technology in spinning to keep its market share in yarn and downstream segments such as cotton fabric, fabric processing, and garments, there will be a decline in the demand for its exports in Europe, its main market for textile products.

In summary, in order to exploit Turkey's resources and improve its international competitiveness in cotton spinning further Turkey needs to take the following measures in order of priority:

- Raising productivity (labour and machine).

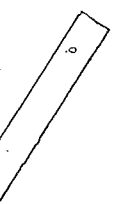
- Increasing the number of hours per year machinery is used.
- Quality improvement and standardisation.

No new capacity investment is needed, but replacements for using open-end technology instead of ring technology is needed.

5.3.1.2 Cotton Weaving

This subsector has a lower rate of investment compared to the amount of funds invested in cotton spinning. Hence, the development in this sector in terms of the increase in the number of looms has been limited. About 60% of all public sector looms in Turkey are over 25 years old, while in the more modernised private sector this ratio is 20%, with about 60% of looms over 10 years old. Moreover, cotton weaving is characterised by the large number of small firms (16-20% of fabric production) and the relatively low penetration of the more efficient shuttleless looms.

The weaving technology has made dramatic improvements with the shuttleless looms having become predominant over older shuttle looms. Due to the lower noise and vibration they make, less labour is needed for the same output, there is better quality (about one fourth of the number of faults per m² compared to the old technology), lower costs, and more productivity (in weft km per hour). Turkey has been adopting the new technology, with shuttleless looms accounting for one third of total fabric production. However, about 45% of total fabrics produced is too narrow to be exported and hence consumed in the domestic market. Therefore, there is a need to modernise this sector so that Turkey can exploit its export



markets by replacing the old narrow shuttle looms with wider shuttleless ones. The total number of looms in the cotton weaving sector is 48,513 looms with the private sector having 13,000 of them including 4,030 shuttleless. Sumerbank has 8,143 looms with only 70 shuttleless while small firms have the remaining 27,370 looms of which only 50 are shuttleless.

The small weavers are concentrated in the Denizli, Usak, Gaziantep, and Bursa regions where they produce a wide range of fabrics with some concentration in towels, bedsheets, and Buldan cheesecloth. They use about 50% of all cotton yarn domestically traded and produce mainly for the domestic market because their products are not exportable due to quality and width reasons.

A very large portion of cotton weavers are vertically integrated: 87% backwards into spinning and 74% forward into fabric processing. Both of these ratios are very high compared to more developed countries with better intermediate markets.

On the whole, the impressively high capacity utilisation (87%) of Turkish cotton weavers reflects their efficiency and together with their vertical integration means that they are cost competitive in European markets due to low labour costs. Moreover, the quality of the products of mainly small Turkish firms (which compete in the domestic market) in this subsector could be improved to increase the competitive abilities of domestic garment makers. Finally, improvements require more investment in shuttleless looms and a reduction in the protection for domestic fabric producers.

5.3.1.3 Fabric Processing

The efficiency and competitiveness of this sector are very important because of its effects on the whole textile sector, since it determines the ultimate value-added gained by Turkey (processing increases fabric value-added by about 20% in wool and at least 80% in cotton). In addition to this, fabric processing affects the export competitiveness of knitted and woven garments as well as the finished fabric itself.

The quality of fabric processing in Turkey has been regarded as unsatisfactory by some exports agents and overseas importers. This inadequate quality of fabric processing negatively affected the competitiveness of Turkish garment makers in the European markets leading them to rely on imported fabric for a large portion of their activity. The major deficiencies in the quality result from:

- Raw material problems (i.e., low quality chemicals, incorrect mixing, ...etc.).
- Process control (pressure, temperature, speed, pH, ...etc.)
- Incorrect machine operation and maintenance (e.g., inadequate cleaning, mechanical friction, ...etc.).
- Poor human skills and inadequate personnel for process management.

As to cost competitiveness, the most important cost component in Turkish fabric processing is energy, followed by input costs such as dyestuff and chemicals. Fabric processing, in general, is energy intensive; in addition to that, Turkish fabric processors are quite wasteful in their energy usage; hence, entailing extra costs. Reasons for energy waste include: non-energy efficient technologies used and the lack of incentives offered for energy saving investments.

Dyestuff and chemicals costs are much higher (by 30-40%) in Turkey compared to Europe. In addition to that, the quality produced is not competitive. The main reasons for cost differences are import duties on dyestuffs, transportation costs, and international pricing differentials imposed by dyestuff makers.

There is adequate capacity to process the amount of cotton and wool fabrics produced domestically. In addition, modern technology penetration is evident; especially in the private sector fabric processing which has about two thirds of its capacity less than ten years old. On the whole, about one third of the existing processing capacity in Turkey (mainly in the public sector) is below the minimum competitive level needed to export.

On the whole, the inefficiencies in this sector result in higher costs by about 20-30% above European standards. These inefficiencies should be measured against low labour costs and the continuing depreciation in the lira. Certain measures should be taken to improve the international competitiveness of this subsector, these measures include: removal of tariffs on the industry's inputs, measures to save energy, improving capacity utilisation, and replacing obsolete capacity estimated to be about 30% of the total.

5.3.1.4 Synthetic Fibres

The synthetic fibre subsector plays an important role in determining the competitiveness of the textile sector, because it affects relative prices through the different mix of fibre used. Turkish synthetic fibre production capacity increased rapidly; especially in polyester and acrylic. In 1985, installed capacity was 146,100 tons in polyester, 25,400 tons in nylon, and 100,000 tons in acrylic. Turkey has now

become a significant world producer of acrylic and to a lesser extent, polyester. The utilisation of this capacity has been above international averages. However, the prices of Turkish synthetic fibres are higher than those in Europe; hence, Turkish manufacturers still use a higher share of cotton in their fibre mix compared to European manufacturers. The reason for the higher prices in Turkey lies in the import duties and fund contributions imposed on the raw materials of synthetic fibres. If these restrictions are lifted, prices will fall paving the way for downstream users to have access to good quality and competitively priced synthetic fibre inputs; hence, increasing their export competitiveness.

5.3.1.5 Wool Spinning

Unlike cotton spinning, the wool sector in Turkey is largely based on meeting domestic demand requirements. Turkey is one of the largest wool producing countries, but domestic wool production is suitable only for use in coarse fabrics, blankets, and carpets. Almost all merino wool used in Turkey is imported; therefore, due to its high cost, the yarns produced contain a very high proportion of synthetic fibres unlike cotton yarns.

Much of the capacity in this sector has grown in the last twenty years; especially in the 1970s. There are approximately 531,000 spindles in the woollen sector, 389,000 spindles worsted, 44,000 semi-worsted, and 98,000 woollen. Of these, some 47% of the spindles are over 20 years old, with the highest proportion of old spindles found in the woollen sector and the highest proportion of new spindles (under 20 years old) being in the semi-worsted sector. The production capacity of these spindles is 39,000 tons worsted, 50,000 tons semi-worsted, and 60,000 tons woollen

yarn. Thus, comparing the production figures with these capacities indicates that the capacity utilisation is low in worsted and semi-worsted spinning (72% and 66% respectively) and high (89%) in woollen spinning.

The major component of cost in wool yarn production is raw materials, accounting for up to 70% of total production cost. However, this cost may be reduced if the import duties and fund contributions were lifted or reduced. Moreover, these restrictions have had distorting effects on the sector, particularly on worsted spinning.

Spinning machinery in the large private sector firms is relatively recent with 75% of worsted and 86% of semi-worsted spindles less than 12 years old, and 78% of woollen spindles under 12 years old. However, in the public sector (Sumerbank) and small private firms the spindles are older.

5.3.1.6 Wool Weaving

The wool weaving subsector in Turkey is almost exclusively oriented towards the domestic market. As in cotton weaving, Turkey has a large number of small wool weaving firms producing the coarser woollen fabrics and blankets with major differences in loom technology and average age between large and small firms.

The sector's capacity has not increased substantially with the investment of private firms in shuttleless looms. The old looms replaced have been sold to the small producers. In 1984, Turkey produced 18,000 tons of worsted and fine woollen cloth, 5,000 tons of medium coarse woollen cloth, and 7,000 tons of blankets. This represented capacity utilisation levels of 82% in worsted and fine woollen weaving

and 40% in medium-coarse woollen cloth and blanket weaving - an overall average of 58%. Most of the unutilised capacity is concentrated in the smaller firms in the sector.

Small firms represent nearly 60% of Turkey's wool weaving capacity, though a smaller proportion of output. Poor machinery produces low quality uncompetitive fabric sustainable only because there is a significant domestic demand for cheap low quality products due to low real income levels.

Wool weavers in the private sector invested heavily in shuttleless technology where 60% of the looms are rapier or projectile technology. Machinery in this sector is relatively recent with 86% of looms 15 years or less old. The productivity levels are comparable with those in Europe; however the plants are slightly over-manned compared to their European counterparts.

On the whole, there is a need to reduce the role of the small companies to allow other firms, producing good qualities, to have easier access to fabric inputs. This may improve the quality of final products ; hence, meeting the demand in the domestic market and abroad.

5.3.1.7 Machine Carpets

Much of Turkey's machine carpet capacity was added in the 1970s when the government promoted machine carpet production for domestic sales with the aim of increasing the availability of hand knotted rugs for export. The capacity of this sector is about 53 million square metres per year; however, the capacity utilisation is low at about 45%, despite the annual rise in the demand for machine carpets by

more than 10%. Export dependence of this sector is low since Turkish producers are uncompetitive with Belgian and Far Eastern producers who dominate Turkey's potential export markets.

5.3.1.8 Hand knotted Carpets

Turkey has the largest hand knotted carpet industry in the world with 240,000 looms, of which 80% are active and about 500,000 knotters of carpets. A significant portion of production is consumed domestically, and in export terms Turkey falls behind India, Pakistan, Morocco, and China.

Turkey produces wool, floss, and silk rugs, with the latter two accounting for 3% of capacity. The cost structure of rug production consists of raw material and labour costs plus some finance costs as rugs take a considerable time to produce. Looms are cheap and easily made. The Turkish carpet industry is extremely flexible to meet any rise in demand, but Turkish labour costs do not allow producers to compete with Indian and Pakistani carpet knotters on a price basis. Therefore, increasing the export volume depends either on creating or growing export markets or improving the quality and design of Turkish carpets.

The fragmentation of this sector leads to little control over design, colour, or quality and without this control many rugs are produced which do not meet the export market specifications. Hence, there is a need to concentrate the rugs production in ateliers by providing the necessary incentives.

5.3.1.9 Knitting

The Turkish knitting sector consists of many small firms (about 65% of total

capacity) and few large firms. The large firms produce mainly T-shirts and underwear for both the domestic and export markets while small firms produce sweaters, lingerie, and limited quantities of dress fabric mainly for the domestic market.

The total capacity of this sector is about 160,000 tons; however, only 80,000-100,000 tons of that capacity is utilised because first, many machines are old, and second, many machines are sometimes idle because of fashion shifts away from their products (e.g., idle double jersey machines when single jersey knitted fabric is in fashion). Hence, measuring against those two factors, one can say that capacity utilisation in this sector stands at about 65-70%.

At present, the export dependence of this sector is low, around 15% of total output despite the fact that the potential is much more than that. Many of the Turkish knitters are forward integrated into garment manufacture while other knitters are backward integrated into yarn. As to the cost structure, raw materials (primarily yarn) and finance costs form the major portion while labour is a minor element.

Moreover, Turkey faces problems with respect to cost competitiveness in a number of knitted goods, this is due to:

- higher domestic synthetic fibre costs.
- Low capacity utilisation.
- Finishing costs and quality.
- Infrastructure problems (design capability, branding, fashion flexibility, ... etc.)

Meanwhile, it is worth mentioning that large firms do not have these problems. On the whole, this sector has a potential for exports with a lesser competitiveness from other countries compared to cotton products. However, the export drive depends on the response of the importing countries, mainly the EC, in the long-run in terms of quota restrictions or the possibility of lifting them by 1996 as part of the proposed Customs Union with the European Community. The elimination of the quotas imposed by the EC would ultimately give a tremendous boost to Turkish textile exports to the Community hence improving its trade deficit and providing the country with the hard currency necessary for its economic development.

5.3.1.10 Woven Ready Made Garments

This sector is one of the most important sectors in the Turkish textile industry in terms of employment (100,000 persons in mid 1980s, a significant proportion of total textile employment) and foreign exchange receipts from exports (8.5% of total export revenues in 1989, see table 5.12). Nevertheless, the sector needs some modernisation and large scale production, which is limited, due to its extremely fragmented nature. However, three factors prevented the development of larger scale enterprises in Turkey, these are: small domestic order sizes (around 1,000 pieces) due to the lack of large retail networks, lack of stability in the export markets, and lack of expertise in running larger garment operations.

As a measure of how dominant small workshops are in Turkey, it can be noted that the percentage of all garment companies with over ten workers is 45% in Hong Kong and 95% in Germany while it is only 2% in Turkey. This domination by small workshops leads to lack of economies of scale and excessive intra-Turkish

competition in export markets.

Although this subsector is competitive enough in the European markets, some problems facing the industry must be solved to fully exploit the potential of this subsector and expand the ready made garments export markets. These problems include:

- Improving price realisation which is a reflection of the tangible and intangible benefits provided to the buyer such as, fabric quality, design content, delivery speed, delivery reliability, adherence to specifications, ...etc. This may increase the average export value on the same volume by a substantial amount.
- Improvements in fabric quality and accessories (e.g., labels, zips, buttons, ...etc.).
- Lack of export marketing skills; especially with respect to trade fairs.
- Lack of design skills.

Overall, the industry has a competitive strength due to low labour costs and proximity to major markets. However, it would be helpful if the distortions represented by the above mentioned problems were dealt with in order that Turkey fully exploits its potential.

5.3.2 Turkish Textile Export Markets

The major consuming regions of Turkish textile products are: the European Community, the United States, the Middle East, and Eastern Europe (table 5.10). Turkey has a strong market presence in several EC textile importing countries,

mainly Germany. Turkey's textile exports are mainly pure cotton products with much smaller export volumes of synthetics, synthetic blends, and wool. However, the entry of Spain and Portugal (major manufacturers of cotton products) to the European Community creates several problems for Turkish cotton exporters in the region. Hence, Turkey has to increase its production and marketing of synthetic products to the extent that the constraints of the EC quota policy permit (see table 5.11) at least until the end of 1995 when Turkey establishes the proposed Customs Union with the EC. In addition, Turkey should seek opportunities to increase price realisation even after the establishment of the Customs Union with the EC because that will add to the competitiveness of its products.

The US market is dominated by Chinese and south east Asian products. Their low labour costs and high specialisation present strong competition for Turkish textiles; especially in the standardised product segments. In addition, Turkey lacks proximity to the US market and also suffers from import tariffs and quotas against its products. This in addition to the increasing penetration of cheap Asian textiles to the Turkish market is putting the Turkish textile producers at a disadvantage which obliged Turkey to impose a 20% antidumping tax on cotton yarn from Pakistan in October 1991 to protect its own industries (Financial Times, November 18, 1992).

Turning to the Middle East, this market is relatively small compared to the EC; hence, Turkish exporters can not rely on it as a permanent importer of their goods; especially as this market is relatively volatile as a result of political influences, payment difficulties, and the possibility of rapid import-substitution by the Middle Eastern countries themselves. Moreover, despite the fact that Turkey can

Table 5.10: Turkish Exports by Countries (US\$ million)

	1986	1987	1988	1989	1990	1991
OECD countries	4,292	6,445	6,707	7,175	8,810	8,856
EEC countries	3,263	4,868	5,098	5,408	6,893	7,042
of which						
Germany	1,444	2,184	2,149	2,175	3,064	3,413
France	299	500	499	595	737	688
United Kingdom	334	541	576	616	745	676
Italy	580	851	955	978	1,106	972
Other OECD countries	1,029	1,577	1,609	1,767	1,917	1,814
of which						
Japan	99	156	209	233	239	226
Switzerland	162	356	265	173	293	246
United States	549	714	761	971	968	913
Eastern Europe	310	334	609	1,030	987	1,262
Middle East & N. Africa	2,494	2,918	3,239	2,608	2,498	2,729
of which						
Iran	564	440	546	561	496	487
Iraq	553	945	986	445	214	122
Kuwait	121	247	199	167	92	8
Libya	136	141	218	227	220	237
Saudi Arabia	358	408	359	364	338	475
Other Countries	247	323	821	550	1,665	750
Total	7,456	10,190	11,662	11,625	12,960	13,598

Source: State Institute of Statistics.

exploit the advantages of its proximity to the Middle East and the absence of quota restraints, it faces tough cost competition from Asian suppliers.

Table 5.11: EC Quotas
on Turkish Yarns (tons)

	1984	1985
Germany	25,945	26,100
France	3,010	3,090
Italy	30,488	30,636
Benelux	13,590	13,680
U.K.	3,820	3,940
Ireland	155	156
Denmark	53	56
Greece	39	42

Source: Financial Times,
from EC Commission,
1984.

Eastern Europe is an even smaller market than the Middle East although Turkish penetration of the Eastern European market has been increasing dramatically. In terms of sales value however the market is relatively small. It is also volatile and usually trades on a non-monetary (barter) basis, which is less welcome than hard currency. However, with the new political developments in that region and the recently signed Declaration of the Black Sea Economic Co-operation, it is believed that there is a good export potential for Turkey in these markets.

Table 5.12: Exports of Ready-Made Clothing (US\$ '000)

	1987	1988	1989
Knitwear			
Underwear	287,604	407,633	482,296
Outwear	483,207	545,775	709,850
Gloves,socks,stockings	23,621	36,406	45,038
Subtotal	794,432	989,814	1,237,184
Woven Clothing			
Outwear for men & boys	190,741	238,982	256,506
Outwear for women & girls	456,240	499,184	512,438
Underwear for men & boys	102,232	118,574	133,237
Underwear for women & girls	13,986	9,299	67,975
Subtotal	763,199	866,039	970,156
Other	4,541	6,976	17,407
Total	1,562,172	1,862,829	2,224,747

Source: Export Promotion Center.

Table 5.12 shows that ready made clothes have the major share in the export of textiles. In 1989, the total value of ready made clothes exported reached US\$ 2,225 million i.e., about 20% of total foreign exchange receipts from exports which reached US\$ 11,625 million. Within this category of exports, knitwear exports increased by more than 50% between 1987 and 1989, and as a result accounted for the largest proportion with US\$ 1,237 million. In 1990, exports of ready made clothing reached US\$ 2,900 million while in 1991 the share of clothes in total Turkish exports rose to 23.5% (about 70% of total textiles exports) with an increase in value to US\$ 3,200 million. Moreover, until July 1992, exports of ready made

clothing reached US\$ 2,200 million (Financial Times, November 18, 1992). No data is available for the breakdown of exports in this category after 1989. The next most important category was woven clothing with exports worth US\$ 970 million in 1989. Yarns and fabrics (table 5.13) took the third and fourth places respectively.

Table 5.13: Turkish Yarns & Fabrics Exports
(quantity: 1,000 tons, value: US\$ million)

	1988		1989	
	Quantity	Value	Quantity	Value
Yarns				
Cotton	107	354	90	265
Wool	1	4	1	4
Man-Made	75	231	69	209
Subtotal	183	589	160	478
Fabrics				
Cotton	28	209	34	254
Wool	-	5	1.83	14
Man-Made	25	169	15	127
Subtotal	53	383	50.83	395

Source: Export Promotion Center.

However, it is difficult to determine the status of Turkish carpets exports as there are no figures for them. Meanwhile, it is worth mentioning that exports of wool yarns have been the same in 1988 and 1989 while wool fabric exports rose from US\$ 5 million in 1988 to US\$ 14 million in 1989; although domestic production was

almost the same during those two years. This shows that wool fabrics are either becoming increasingly competitive in world markets or that there is a decline in demand at home.

5.4 Export Incentives

As textiles represent the spearhead of Turkish exports, it is necessary to discuss the competitiveness of these exports from both the quality and cost sides. These two factors are, of course, inherent in the industry itself (as demonstrated in the previous section) but can be influenced by external policies implemented by the government (including export incentives). In view of the significance of textiles in relation to total exports, it is worth dealing with export incentives at this stage. Export incentives of course influence not only textiles exports, but Turkish exports as a whole; especially manufactured products, as we will see later.

To be eligible for export incentives, the share of minerals and manufactured products in total exports must be at least 75% and the minimum export volume requirement is US\$ 30 million for each company which must also have a paid up capital of TL 500 million² (Nas, T. and Odekon, M., 1992). Exporters usually apply to the TUB (Tevsik ve Uygulama Baskanligi) for an export incentive certificate, and on the basis of this receive a multitude of incentives of which the most significant are preferential credit, foreign exchange allocation (for imported inputs), and export tax rebates. For preferential credit, the certificate is presented to the commercial bank which, after extending the credit, discounts all or part of it at the Central Bank. Usually, export credits are granted at a rate lower than

² Regulations for large foreign trade Turkish companies.

the one charged on similar projects whose output is not directed for exports. For foreign exchange allocations, the certificate gives the exporter the right to purchase foreign exchange from the commercial bank, which is later repaid by the Central Bank, as well as the right to import duty-free inputs up to the amount of purchased foreign exchange. The former is becoming of less importance with the liberalisation of foreign exchange transactions. Finally, export tax rebates are supposed to reimburse exporters, after the completion of the export process, for the indirect taxes they paid during the manufacturing of their products. In what follows, each one of the above mentioned incentives will be discussed briefly before a conclusion is reached as to which is the most effective.

5.4.1 Export Tax Rebates

Originally, before 1975, tax rebates were paid individually for each exported product. However, after 1975, all products eligible for export tax rebates were arranged in ten lists and after 1987 these lists were reduced to five. The rebates varied according to the product (list); however, the average was about 21% in 1984. For all exports between US\$ 2 million and US\$ 10 million, the exporter receives an additional marginal rebate of 6% and for exports between US\$ 10 million and US\$ 30 million, the additional rebate is 12% (Milanovic, B., 1986 and Aricanli, T. and Rodrik, D., 1990).

The subsidy element in the export tax rebate scheme depends on: (1) the share of eligible exports in total exports, (2) the average tax rebate rate, and (3) the actual indirect taxes paid for which the scheme is supposed to compensate. Obviously, the higher the share of indirect taxes in the total value of exports, the

Table 5.14: Export Tax Rebate in the Manufacturing Sector in 1984 (TTL million)

	Total Exports	Eligible Exports	Share of Elig. in Total ^a	Tax Rebates	Tax Rebate Rate ^b
Food & beverages	304046.19	229539	75.5	37814	16.5
Textile & clothing	684819.53	588762	86	131078	22.3
Leather & fur	146773.28	122606	83.5	29843	24.3
Paper	57439.95	33404	58.2	6200	18.6
Chemicals	-	-	-	12258	17.4
Rubber & plastic	36533.45	24812	67.9	4908	19.8
Glass	55097.58	37189	67.5	7714	20.7
Cement	-	-	-	4524	17.2
Iron & steel	214112.57	186016	86.9	45832	24.6
Non-ferrous metals	-	-	-	7402	20.4
Fabric metal prod.	-	-	-	4579	22.0
Non-elect. mach.	-	-	-	10524	14.8
Elect. machinery	35136.93	32347	92.1	7591	23.5
Transp. equipment	48942.6	39953	81.6	9423	23.6
Total	1750222.5	1519979	86.8	319690	21.0

(a) Percentage share of eligible exports in total exports.

(b) (Tax rebates / eligible exports) multiplied by 100.

Source: Milanovic, B., World Bank, 1986.

less would be the incentive value of the scheme. Table 5.14, shows the export tax rebates in different industries while table 5.15 demonstrates the subsidy component in every industry. With respect to the tax rebates, it is clear that the iron and steel industry enjoyed the highest tax rebate rate followed by the fabricated metal products.

Table 5.15: Export Tax Rebate Subsidy Component (% of export value)

	1981	1982	1983	1984	1985	1986	1987	1988	1989
Food & beverages	2.6	6.42	5.9	7.24	2.9	4.6	4.2	0.8	- 2
Textiles & clothing	2.19	9.34	12.05	10.76	0.7	- 5	- 4.5	- 4.9	- 7.4
Leather & fur	7.32	12.89	17.7	15.33	3.5	- 0.7	- 3.3	- 3.4	- 3.7
Paper	0.33	14.22	9.71	8.02	3	0.4	- 0.9	6	- 4.4
Chemicals	2.45	6.27	12.4	10.82	6.1	7.1	6.4	5.4	1.2
Rubber & plastic	3.71	11.96	9.37	10.13	4.6	2.1	- 1.3	- 1.5	- 3.5
Glass	2.47	10.89	6.8	9.59	2.9	3.4	3.5	0.4	- 3.1
Cement	10.7	18.8	16.09	13.82	13.4	11.2	27.8	10.3	- 3
Iron & steel	2.18	9.38	13.65	16.14	12.6	12.9	10.2	9.3	7.4
Non-ferous metals	5.31	11.8	12.45	14.26	- 6.9	- 6.7	- 11	- 12.2	- 16.5
Fabricated metal prod.	19.52	62.04	79.04	50.54	10.8	14.6	4.9	10.7	0.2
Non-electric. mach.	2.73	9.74	17.79	6.75	4.2	3.2	2.7	1.3	- 2.8
Electrical machinery	3.54	10.9	13.21	14.87	5.5	6.1	4.4	- 0.1	- 3
Transp. equip.	3.96	6.32	4.57	3.61	0.5	- 2.8	- 3.9	- 4	- 11.3

Source: Milanovic, B., World Bank (1986) and Krueger, A. and Aktan, O., 1992.

It is worth mentioning that with the proposed Customs Union with the EC by 1996, export tax rebates to domestic industries are to be lifted. Thus, products that

are heavily dependent on government support such as fabricated metal products (see table 5.15) are expected to be negatively affected.

However, this negative impact will be outweighed by the benefits gained in terms of increased exports of textiles and other products which rely less on such subsidies. These products are expected to perform well after the establishment of the Customs Union which would remove any tariffs and quotas facing Turkish exports to the Community. Meanwhile, as part of its preparation for the proposed Union, the Turkish government seems to be phasing out tax rebates which reached 8% in 1992 down from 12% last year (OECD, 1992).

5.4.2 Export Credits

The incentive value of export credits lies in the difference between the rate of interest charged on general short-term (ST) credits and a lower rate of interest on export credits. Several funds were used for this purpose. One was the Export Promotion Fund established in the 1960s as the Special Export Fund. Its name was changed in 1980 to the EPF. It provided credit for exporters of fresh fruit and vegetables, marine products, export trading companies, and construction contractors overseas. A second fund was the Interest Rate Rebate Fund which was intended to compensate the difference in interest rates between general and export credits. In mid 1987, the Turkish Export Credit Bank (Export-Import Bank) was charged with the responsibility of supplying credits to exporters and providing insurance for exporters, investors abroad, and contractors. In 1989, the Foreign Trade Corporate Companies Rediscount Credit Facility was established which extended credits through the Export-Import Bank to Turkish companies involved in

foreign trade whose exports exceeded US\$ 100 million per year (Krueger, A. and Oktan, O., 1992).

Table 5.16 shows that the interest rate differential between general and export credits is declining. This is mainly due to the rise in the interest rate charged on export credits.

Table 5.16: Interest Rates on Export and General Short-Term Credit (% p.a.)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
(1)	15.1	20.3	27.2	28.0	46.1	55	52.9	40	40.7	37.1
(2)	38.3	50.2	47.5	46.9	63.1	72	72.8	77.6	64.8	64.1
(3)	23.3	29.9	20.3	18.9	17.0	17	19.9	37.6	24.1	27

Source: Milanovic, B., World Bank, (1986) and Krueger, A. and Aktan, O., 1992.

- (1) Nominal interest rate on export credits.
- (2) Nominal interest rate on general ST credits.
- (3) The differential: (2) - (1).

The difference between the interest rate on general and export credit stems from three factors: (i) a higher base rate for the general credit; (ii) a positive contribution to the Interest Rate Rebate Fund (IRRF) on general credits versus a net subsidy received from the Fund on export credits; and (iii) exemption of export credits from the transaction tax. Factors (ii) and (iii) represent the most obvious subsidies.

The subsidy component of export credits is demonstrated in table 5.17 where high subsidies are clearly concentrated in capital (heavy industry) goods. In addition, it is clear from the table that the manufacturing sector's share in the credits'

Table 5.17: Exports Credit Subsidy as Percentage Proportion of Exports

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Manufacturing	5.5	6.4	7.2	7	6	3.2	3.6	5.9	9.1	9.1
Food & Beverages	0.7	0.8	1.2	0.9	0.7	0.4	0.5	0.8	1.2	1.2
Textiles	2.4	2.5	2	2.2	1.8	1.1	1.2	2.1	3.1	3.1
Wood Products	0.1	0.2	0.2	0.1	0	0.1	0.1	0.1	0.2	0.2
Paper	0	0	0.1	0.1	0	0	0	0	0.1	0.1
Leather & fur	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2
Chemicals	0.1	0.2	0.1	0.3	0.3	0.1	0.2	0.3	0.2	0.2
Glass	0.2	0.3	0.4	0.2	0	0.1	0.1	0.2	0.4	0.4
Iron & steel	0.1	0.3	0.2	1.3	1.4	0.1	0.4	0.7	0.2	0.2
Non-ferrous metals	0.2	0.2	1	0.3	0.2	0.4	0.1	0.2	1.1	1.1
Metal products	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.2	0.3	0.3
Non-elect. mach.	0.2	0.1	0.2	0.4	0.1	0.1	0.1	0.2	0.2	0.2
Electrical mach.	0.2	0.1	0.2	0.4	0.1	0.1	0.1	0.2	0.2	0.2
Transp. equip.	0.3	0.2	0.4	0.1	0.3	0.2	0.2	0.3	0.4	0.4
Cement	0	0	0	0.1	0.1	0	0.1	0.1	0	0
Rubber & Plastic	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.3	0.3
Others	0.2	0.2	0.1	0.1	0.1	0.1	0	0.1	0.2	0.2

Source: Krueger, A. and Aktan, O., 1992.

subsidy is increasing (it almost doubled between 1980 and 1989). Industries with the highest subsidy component in 1989 were food and beverages, textiles, nonferrous metals, metal products, non-electrical machinery, rubber & plastic, and glass and ceramics. While industries with the lowest subsidy component included paper and leather. Finally, it is worth mentioning that soft-term credits are still granted (no detailed data is available) through the Turkish Eximbank providing exports exceeded US\$ 1 million (OECD, 1992).

Finally, until the liberalisation of exchange controls which permitted foreign borrowing, the preferential rates of export credits was a valuable incentive for exporters. However, it lost some of its value with the liberalisation of the foreign exchange system in Turkey, and some exporters even stopped using the Export-Import Bank credits altogether.

5.4.3 Foreign Exchange Allocation

Exporters applying to the TUB for this facility get (if their application was accepted) foreign exchange for their import needs and/or receive the right to duty-free imports up to the amount of the allocated foreign exchange. The latter should not exceed 40% of the pledged export value.

The incentive value of this scheme is two fold. First, it gives right to duty-free imports of intermediate and raw materials. The amounts of duties saved represent the subsidy. Second, foreign currency generally used to have a premium over its official rate which could be appropriated by the exporter. However, as the overvaluation of the Turkish lira ceased to exist with the liberalisation of the exchange rate, this part of the subsidy is now close to nil. In terms of individual

industries, subsidies are heavily concentrated in four: non-ferrous metals, metal products, electrical machinery, and transport equipment.

Other incentives included the foreign exchange allocation scheme which allowed exporters to retain foreign exchange from their export activities. In 1989, the retention ratio was 30% of total export receipts if surrender of the foreign exchange was within 3 months. This scheme became irrelevant with the liberalisation of the payments system in Turkey. Another export incentive which started in 1981 was the permission given to exporters to claim an exemption from their corporate profits taxes equal to 20% of the value of their exports and to pay a much lower rate on their exempted portion. The tax exemption was worth 6-8% of the value of exports for a profitable company. In addition, in 1987, a transportation export incentive was granted (about US\$ 6 per ton). Another incentive scheme that started in 1987 also was an advance payment of 30% of the export tax refund (Krueger, A. and Aktan, O., 1992).

Moreover, in addition to the above mentioned export incentives, the government introduced a 4% across-the-board cash premium to exporters in 1985. This new export incentive was intended as a compensation for reduced tax rebate rates. Furthermore, a new system of cash incentives was introduced in January 1987. This is a selective system of export subsidies covering 110 commodity categories. The rates of payments are specific and, in principle, determined on the basis of comparison of domestic costs and international prices. Data on the implementation of this new incentive are not yet available (Arıcanlı, T. and Rodrik, D., 1990).

5.4.4 Export Incentives: An Assessment

On the whole, the real effective exchange rate remains one of the export incentives for Turkish manufacturers despite its moderate role (see chapter 4). The exchange rate determines the price competitiveness of Turkish products, which together with direct export incentives and the availability of industrial capacity may keep the export drive in Turkey thriving.

According to a survey carried out in Milanovic's paper, 80% of export firms included in the survey preferred tax rebates among other incentives. This might be one of the reasons for the increasing share of tax rebates in comparison with other incentives (see table 5.18).

Table 5.18: Weights of the Export Incentives (% of export value)

	1980	1981	1982	1983	1984
Tax Rebate	0.0	3.6	10.07	11.5	11.07
Preferential Export Credits	16.6	12.51	6.36	6.47	1.07
Foreign Exchange Allocation	5.45	4.39	4.18	5.42	2.94
Total	22.05	20.50	20.61	23.39	15.08

Source: Milanovic, B., World Bank, 1986.

Moreover, with export incentives fading due to the intention of the government to stimulate exports less through direct export subsidies as part of the preparation for the Customs Union with the EC by 1996 (no data is available for the new changes in export incentives after 1989, despite contacting some Turkish sources such as the Export Promotion Center) one can say that these subsidies (in addition to other external factors such as the Iran-Iraq war) played an important role in

boosting Turkish exports at the beginning of the 1980s.

5.5 Conclusion

In the end one can say that despite some of the problems faced by the Turkish manufacturing sector in general and some subsectors in the textile industry in particular, the low labour costs, low input costs of cotton and wool, the availability of unutilised industrial capacity especially before 1985, and the depreciation in the lira helped Turkish textiles in gaining an edge of competitiveness in the EC which made the achievement in the 1980s quite impressive. However, this success is not secure from an economic point of view whether internally or externally. Internally, the threat of rising inflation, rising interest rates, and the increasing squeeze on domestic financial resources due to the increasing budget deficit puts downward pressure on the development of Turkish industry and its ability to increase its industrial capacity which is necessary to raise industrial production. Externally this depends on the quota restrictions implemented by the governments of Turkey's major export markets (mainly the EC), the establishment of the Customs Union with the EC by 1996, and the ability of Turkish exporters to enter new markets (Eastern Europe in particular) or exploit more efficiently the present export markets (mainly through price realisation). Moreover, with no major developments in the GATT talks or the Multi Fibre Agreement (MFA), Turkey is vulnerable to a growth of bilateral agreements and quotas.

It is believed that industries depending heavily on government subsidies (export tax rebates and others) such as fabricated metal products will be negatively affected by the establishment of the Customs Union (which forbids any form of

support to local industries) with the EC by 1996. However, industries that rely less on those incentives such as textiles are expected to increase their share in exports dramatically thus compensating for the loss in income from other manufacturing subsectors.

Turkey needs to improve the quality (skill) of its labour to increase the productivity of that factor input. In addition, Turkey needs to import adequate technology through advanced capital goods. Moreover, the export incentives should remain for the time being (at least until the establishment of the Customs Union with the EC) to keep the export drive thriving bearing in mind that there are no distorting factors (e.g., high wages, high import duties on raw materials, ...etc.) negatively affecting the process.

Finally, Turkey has the potential to become an industrial country. However, the country still has a long way to go on that path. This is due to the tough competition from other newly industrialised countries in export markets where the ability to export industrial goods to the world markets is considered one of the best measures to test the level of industrial development of a country.

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Chapter VI

Turkish Agriculture in the 1980s

6.1 Introduction

Despite the fact that the overall importance of agriculture in GDP is declining (17.5% of GDP in 1990 down from 22% in 1979), this sector still uses a major portion of Turkey's resources. About 45% of the employed labour force is in the agricultural sector³, according to the 1990 census of population, and 280 thousand square kilometers (i.e., about 28 million hectares) or about one third of the total land area is under cultivation, with cereals being farmed on more than two thirds of that area.

Agricultural products in Turkey may be classified into four categories (World Bank, 1982):

1. Non-export or import-substitution crops (mainly before 1980) which include wheat, sugarbeet, sunflower, and tea. These products received considerable encouragement from the government, especially before 1980, in the form of price support, the allocation of subsidised inputs, and the provision of extension services. Such incentives were aimed at increasing self-sufficiency in these products.

³ It is worth mentioning that Turkish employment statistics in agriculture are often exaggerated by an error of about five per cent due to the way figures are calculated where any household member over 12 years old living in a village is assumed to be working in a farm.

2. Traditional export crops include nuts, dried fruits, and tobacco. Turkish exports of these products constitute a sizeable share in world trade.
3. Major exports crops such as cotton, pulses, roots, and olive oil.
4. Fruit and vegetables, livestock and livestock products, and fish.

The Turkish government supports the agricultural sector in various ways. Farmers are granted credit subsidies and subsidies to major agricultural inputs are allocated with the aim of developing the sector. In addition, the SEEs purchase agricultural products from farmers and engage in agro-industrial activities. Furthermore, the government is investing billions of dollars in a major agricultural project in the south east of the country (GAP project) which is expected to boost the sector and the industries related to it substantially with a positive impact on the economy as a whole.

Until 1980, the government set support prices for 23 major agricultural products, the exception being fruit and vegetables. It had a monopoly for sugarbeet, tobacco, and tea while the public sector agencies purchased varying amounts of output of other crops which were marketed by the SEEs and sales co-operatives at prices fixed below cost, with the government absorbing the resulting losses. Moreover, the government invested in large irrigation projects, provided subsidies for inputs to machinery, granted preferential credits that encouraged capital-intensive activities, subsidised fertilisers, and set low water charges. These incentives which were aimed mainly at non-export crops led to several distortions such as inefficient use of water, the expansion of non-export crops at the expense of other crops, over-use of fertilisers, and in some cases over-mechanisation; especially in small

land holdings (World Bank, 1982).

In the January 1980 reforms, the government efforts to improve agricultural productivity revolved around liberalising the market for agricultural goods by allowing imports and abolishing the multiple exchange rate system which discriminated against agricultural exports, thus stimulating efficiency. However, the government still sets the prices of 20 crops which are now more realistic and based on actual costs. This policy still creates distortions in the market which prevents it from being fully free in terms of price determination, gives wrong signals to farmers as to what to cultivate the next season, and does not compensate for the expected rise in inflation the following year. Farmers claim that this policy made growing some products uneconomic while the government argues that the policy ensured the cultivation of crops in which Turkey has a comparative advantage and that farmers ignore the level of subsidised assistance that they receive through the Agricultural Bank. In addition to the rationalisation of prices, subsidies on fertilisers were reduced, and water charges were raised to cover the cost of operating and maintaining the irrigation schemes (World Bank, 1982).

This chapter will look at the state of the Turkish agricultural sector after 1980 and assess the effects of the structural adjustment programme on the different subsectors and variables such as inputs, external trade, and prices. The increase in the volume of agricultural produce in comparison with 1979 will be considered a sign of improvement. The main problem this chapter is attempting to address is whether the liberalisation measures had any positive impact (increase in the area of land cultivated, increase in production, ...etc.) on agriculture. In addition, the chapter will try to highlight the disadvantages of the economic policies imple-

mented before 1980 and whether the adjustment programme managed to eliminate them in order to accelerate the development of agriculture and utilise the available resources more efficiently. A section on the South Anatolia Project (GAP) will also be included.

6.2 Structure of the Public Sector in Agriculture

The agricultural public sector consists mainly of intermediary establishments that either help in providing inputs for agricultural products or purchase the production from farmers and market it according to the policies set by the government. After 1980, the public sector policy changed from one that provides cheap inputs (credit, fertilisers, water, ...etc.) and purchases products according to a price support scheme, which exacerbated budget deficits, to a sector that functions according to market forces within a general support strategy. The main public sector institutions are (British Agricultural Export Council, 1986):

1. The Ministry of Agriculture, Forestry, and Rural Affairs (MAFRA): besides its own five directorates which deal with issues such as plants protection, project implementation, rural services, and agrarian reform, MAFRA has seven state economic enterprises which function under its auspices. These are TZDK, State Farms, TMO, TSEK (for dairy products), EBK (for meat processing), Yem Sanayii Turk (for animal feed), and Orman Genel Mudurlugu (Forestry General Directorate) which is responsible for wood production and processing.
2. State Hydraulic Works (Devlet Su Isleri, DSI): this ministry is responsible for irrigation works.

3. The Turkish Agricultural Supply Organisation (Turkiye Zirai Donatim Kurumu, TZDK). This organisation is responsible for supplying farmers with agricultural machinery, fertilisers, some agrochemicals, and some seeds. It has 25 branch offices, 385 sub-offices, 24 repair shops, 30 mobile service teams, and four seed processing plants located all over Turkey. It also has eight farm machinery manufacturing plants and a fertiliser factory.

4. Co-operatives: there are two types of co-operatives in Turkey, credit co-operatives and marketing or sales co-operatives. The credit co-operatives deal with the supply of farm inputs while marketing co-operatives process and sell the output of certain crops. Credit co-operatives which have a total of about 1.5 million members in 2,300 co-operatives are the major supplier of seeds and collaborate with the Agricultural Bank (Ziraat Bankasi) to provide credits to farmers. There are 11 major marketing co-operatives, some deal with individual products like hazelnuts and pistachios while others deal with crops such as cotton, figs, raisins, olives, and sunflower. Marketing co-operatives either sell the crops fresh or engage in agro-industrial processes where they dry raisins and figs, crush cotton seeds for oil to make margarine and soap, gin and spin cotton, and extract oil from sunflower seeds.

5. State Farms: there are 39 state farms in Turkey with an aggregate land area of 386,743 hectares i.e., about 1 per cent of the total agricultural land. Fifteen of these farms mainly specialise in livestock breeding and are quite small in terms of the total area covered. The main crops grown by the Farms are wheat, barley, cotton, and sunflower, with soya increasing in importance. Over 9,000 hectares are devoted to fruit production. The contribution of the livestock in

the state farms to the livestock sector in Turkey was minor in 1984 with 23,500 head of cattle, 130,000 sheep, and 120,000 chicken out of a total of 12.4 million, 40.4 million, and 60.5 million respectively.

6. The Soil Products Office: this is a marketing agency for grains, pulses, and opium. It is the main grain drier operator in Turkey and a significant buyer of grain storage, drying, and handling equipment.

From the above mentioned functions of the main public sector institutions, it is difficult to assess their weight in comparison with the private sector. More specific information and figures (presently unavailable) regarding the activities of both sectors is needed in order to prepare a more comprehensive comparative study. Meanwhile, it is evident that the role of the public sector in Turkey is confined to help and assistance rather than the engagement in actual production as is the case in the manufacturing sector. However, through its policies and institutions, the sector is capable of influencing the decision-makers in agriculture; hence, indirectly determining their strategies.

6.3 Area Cultivated and Agricultural Production

Partly because of the variety of climate between its regions (see table 6.1), Turkey's agriculture is greatly specialised. Cereals occupied about 70% of the total area sown in 1990 down from 82.9% in 1979 with wheat and barley being the major cereal produce (tables 6.2 and 6.3). The decline in the area cultivated with cereals may be due to the policies followed after the 1980 reforms when non-export crops were less supported. Moreover, although this area declined in relative terms, it remained almost the same in absolute terms. The rise in the total area sown

which resulted from the farming of more fallow lands was mainly devoted to the cultivation of pulses. The decline in the area devoted for cereals did not lead to a decline in production (table 6.3), on the contrary, this suggests that agriculture in that area is getting more efficient due to the better use of agricultural machinery, fertilisers, and water (see section on agricultural inputs).

Other agricultural products include industrial crops (tobacco, cotton, sugar-beet, ...etc.), pulses, and oil seeds (mainly sunflower). Industrial crops seem to have a relatively slow response to the 1980 adjustment programme and the resulting new export drive. Production rose by about 50% from 9,485 thousand tons in 1979 to 14,291 thousand tons in 1990 compared to oil seeds production which jumped from 972 thousand tons in 1979 to 2,195 thousand tons in 1990.

Table 6.1: Climate in Different Turkish Regions

Region	Av. Temp. ^a	Av. Precip. ^b	Av. Humidity ^c	Snow (days)
Central North	11	375	60	22
Agean	16	800	65	-
Marmara	14	700	70	10
Mediterranean	18	700	62	-
North East	7	400	60	100
South East	8-9	450	50	1-80
Black Sea	14	1500	75	10
Central East	12	400	55	30
Central South	11	350	60	22

a = Average temperature in Celsius.

b = Average precipitation in mm.

c = Average humidity in per cent.

Source: World Bank, 1982.

Sugar beet production had the highest increase among industrial crops rising from 8,760 thousand tons in 1979 to 13,985 thousand tons in 1990, while cotton was the second highest with 476 thousand tons in 1979 to 587 thousand tons in 1990. The rise in cotton production is considered relatively modest given the expected increase in demand for this commodity due to the rise in cotton manufactured exports. The rise in sugar beet production is not anticipated to be a result of the liberalisation measures implemented by the government, but simply due to the rise in domestic demand and the self-sufficiency strategy that the Turkish authorities still follow. On the other hand, there has been a tremendous increase in the production of pulses since 1980. The area sown rose from 677 thousand hectares in 1979 to 2.3 million hectares in 1990 i.e., from 4.1% of total area sown in 1979 to 11.6% in 1990. The rise in the cultivated area was reflected in the amount of pulses produced which rose from 762 thousand tons in 1979 to 2.2 million tons in 1990.

There has also been a great increase in the production of oil seeds although the area sown rose modestly to 8.7% of total area sown in 1990 compared to 7.2% in 1979 (table 6.2). On the whole, total production rose more than twofold with the bulk of that increase due to the boost from the sunflower harvest which rose from 59 thousand tons in 1979 to 860 thousand tons in 1990.

6.3.1 Yields

Table 6.3 shows that despite the fact that the area sown with cereals did not change substantially over the period 1979-1990 (see table 6.2), production rose from 25.6 million tons (1979) to about 30.1 million tons (1990). The rise in the volume

Table 6.2: Distribution of Agricultural Products on Total Area Sown ('000 hectares)

	Fallow	% ^a	T. Area Sown ^b	Cereals	% ^a	Pulses	% ^a	Ind. Crops ^c	% ^a	Oil Seeds	% ^a
1979	8,367	50.4	16,605	13,771	82.9	677	4.1	1,155	6.9	1,193	7.2
1985	6,025	33.6	17,908	13,845	77.3	1,434	8	1,258	7	1,489	8.3
1986	5,771	31.8	18,149	13,781	76	1,723	9.5	1,176	6.5	1,500	8.3
1987	5,574	29.7	18,781	13,846	73.7	2,059	10.1	1,282	6.8	1,628	8.7
1988	5,179	27.3	18,995	13,817	72.7	2,249	11.8	1,437	7.6	1,701	8.9
1989	5,234	27.6	18,976	13,741	72.4	2,310	12.2	1,389	7.3	1,732	9.1
1990	5,324	27	19,656	13,711	69.7	2,286	11.6	1,449	7.4	1,708	8.7

a = Percentage of total area sown.

b = Total area sown excluding fruits, vegetables, and other tree produce.

c = Industrial crops.

Source: State Institute of Statistics.

Table 6.3: Production and Yields of Major Agricultural Products (production in '000 tons and yield in Kg/hectare)

	1979		1985		1986		1987		1988		1989		1990	
	Production	Yield	Production	Yield	Production	Yield	Production	Yield	Production	Yield	Production	Yield	Production	Yield
Cereals	25,651	1,812	26,385	1,902	29,248	2,089	29,172	2,052	30,789	2,065	23,366	1,787	30,109	1,988
Wheat	17,550	1,867	17,000	1,838	19,000	2,036	18,900	2,035	20,500	2,188	16,200	1,759	20,000	2,116
Barley	5,240	1,871	6,500	1,949	7,000	2,103	6,900	2,092	7,500	2,189	4,500	1,351	7,300	2,179
Pulses	762	1,265	1,468	1,229	1,931	1,243	2,154	1,247	2,321	1,308	1,677	1,194	2,189	1,266
Ind. Crops^a	9,485	5,297	10,578	4,944	11,396	5,021	13,509	5,360	12,507	5,888	12,458	5,953	14,291	6,774
Tobacco	206	929	170	964	158	933	185	896	219	924	219	924	287	929
Cotton	476	778	518	785	518	885	537	916	650	878	650	878	587	-
Sugarbeet	8,760	32,493	9,830	30,758	10,662	30,695	12,717	33,042	11,534	36,512	11,534	36,512	13,985	36,819
Oil seeds	972	1,071	1,868	1,360	2,075	1,219	2,343	1,251	2,461	1,214	2,555	1,125	2,195	1,092
Sunflower	59	1,326	800	1,245	940	1,365	1,100	1,419	1,150	1,534	1,250	1,630	860	1,201
Groundnuts	58	2,300	59	2,783	50	2,273	80	2,492	60	2,553	50	2,500	63	2,625
Cotton seed	762	1,245	829	1,256	829	1,417	859	1,466	1,040	1,405	1,040	1,405	940	-

a = Industrial Crops.

(*) Aggregate figures for cereals, pulses, industrial crops, oil seeds, and category yield figures are my own calculation. Category yield figures are average yields of products in the category.

Source: State Institute of Statistics.

of cereals produced was mainly due to the rise in yield from 1,812 kg/hectare in 1979 to 1,988 kg/hectare in 1990. Moreover, cotton and sugarbeet; especially the latter, also showed substantial increases in their yields. The yield for cotton rose from 778 kg/hectare in 1979 to 878 kg/hectare in 1989, while the yield for sugarbeet rose from 32,493 kg/hectare in 1979 to 36,819 kg/hectare in 1990.

It is clear that the products that enjoyed the highest increase in yields (cereals and sugarbeet) are the ones that used to be non-export crops and received considerable encouragement before 1980. However, although government intervention and the policies accompanying it (subsidised inputs, price support, extension services, ...etc.) has been reduced with economic liberalisation, the effects still exist in terms of the relative development of these agricultural subsectors. This gave them the ability to survive easily and perform better than other subsectors although government support was lifted.

It is interesting that these results are contrary to the World Bank's simulation model predictions which expected that a policy of trade liberalisation and realistic exchange rates would cause production and exports of tobacco, cotton, fruits, vegetables, and livestock to grow in excess of historical rates. In turn, the production of wheat, barley, and roots would not grow or grow at rates below historical rates. Finally, corn, rye, rice, sunflower, sugarbeet, and olive oil would experience a decline (World Bank, 1982).

It is clear from table 6.3 that the production of wheat and barley increased after the liberalisation of trade and exchange rates in 1980. In addition, the production of sugarbeet and sunflower never registered any decline after 1980 below the 1979 level. Thus, the World Bank made a major miscalculation in relation to Turkey's

capabilities and its agricultural potential which raises doubts about the validity of its model.

The reasons for the increase in the yields of most agricultural products could be attributed to the more efficient use of fertilisers, the use of better quality seeds whether produced domestically or imported, the increasing use of machinery, and the increasing area of irrigated land.

6.3.2 Fruit and Vegetables

The fruit and vegetables subsector may be the only agricultural subsector that did not receive any major government support. The land under vegetable cultivation is relatively small if, for example, it is compared to cereals. Moreover, the expansion in the land devoted to the cultivation of the former product has been slowing down. During 1975-1979, the cultivated land increased from 490 thousand hectares to 571 thousand hectares i.e., 81 thousand hectares, whereas during the whole decade (1979-1990) the cultivated land increased by only 64 thousand hectares (from 571 thousand hectares to 635 thousand hectares) i.e., an average decline in expansion of about 20%. However, over the same period the production of vegetables increased by about 30% due to the increase in yields.

As regards fruit, orchards also had a slow-down in the rate of expansion of cultivated land which had the same trend as vegetables. The area devoted for orchards increased from about 1.2 million hectares to about 1.4 million hectares between 1975 and 1979, whereas the same increase occurred in double that period, 1979-1990 (see table 6.4). The area devoted for vineyards decreased substantially (by more than 25%) after the 1980 reforms as the total area declined from 850

thousand hectares in 1979 to 580 thousand hectares in 1990. It is not known why there was a decline in the rate of expansion of tree plantation, but one reason may be the decreasing number of available agricultural workers; many had migrated to the urban centres to work in industry where wages were higher.

The production of hazelnuts rose by about 25% between 1979 and 1990 (table 6.5) with exports of this product increasing from US\$ 353 million in 1979 (15.6% of total Turkish exports) to US\$ 456 million in 1990 (3.5%).

Table 6.4: Distribution of Arable Land and Forest
Area ('000 hectares)

	1979	1985	1986	1987	1988	1989	1990
Crop area*	24,972	23,933	23,920	24,355	24,174	24,210	24,980
Vegetables	571	662	638	609	612	610	635
Vineyards	850	625	600	590	590	597	580
Orchards	1,352	1,489	1,490	1,517	1,531	1,563	1,583
Olives	812	821	835	856	856	857	867
Forests	20,155	20,199	20,199	20,199	20,199	20,199	20,199

(*) Includes sown and fallow lands.

Source: State Institute of Statistics.

Table 6.5: Vegetables and Tree Production ('000 tons)

	1979	1985	1986	1987	1988	1989	1990
Vegetables	12,576	15,258	14,838	15,223	15,446	15,282	16,457
Fruits	3,502,452	6,865	6,808	6,692	7,327	7,322	7,360
of which							
Apples	1,350	1,900	1,865	1,680	1,950	1,850	1,900
Grapes	3,500	3,300	3,000	3,300	3,350	3,430	3,500
Figs	200	340	370	355	350	279	300
Nuts	543	422	550	543	660	728	630
of which							
Hazelnuts	300	180	300	280	403	456	375
Olives	4,300	600	1,010	600	1,100	500	1,100
Citrus Fruits	1,147	983	1,396	1,343	1,445	1,443	1,474
Tea	102	137	148	141	153	136	122

Source: State Institute of Statistics.

Data on grape production is curious with respect to the sudden rise in production between 1977 and 1979. In 1976, grape production was about 3.1 million tons, but in 1977 this figure jumped to about 3,496 million tons and rose to 3,500 million tons in 1978 and 1979 (State Institute of Statistics, 1980). These figures raise suspicions of a possible error in the data collection carried out by the State Institute of Statistics in Ankara (Turkey). Therefore, the grape production figure for 1979 was changed by the author from 3,500 million tons to 3,500 thousand tons which is in line with the general trend of grape production in Turkey. On the other hand, the fluctuation in the production of olives is normal and due to the

bi-annual nature of olive trees⁴.

6.4 Livestock and Fishery Products

In 1978, both beef and mutton were discriminated against by the system of government incentives. Domestic prices were depressed not only because of the price support policy but due to the overvalued exchange rate. Thus, the exports of beef and mutton were limited, according to the official figures, leading to less animals being slaughtered and a bigger number of live animals, as the latter was not allowed to be exported.

The policy led to large quantities of meat and animals being smuggled through the Turkish borders in the form of exports which were not registered officially. These activities were part of the large black market that existed in Turkey before 1980. This aggravated the economic problems that Turkey was suffering from during that period, as black market activity also involved unofficial exchange rates and capital transfers.

However, with the changing export environment in the 1980s that included the devaluation of the exchange rate, the abolition of official producer prices, and the removal of consumer subsidies to beef and mutton, the number of slaughtered animals almost doubled between 1979 and 1990 (table 6.6). In 1979, the number of animals slaughtered reached about 8.7 million head (including cattle, sheep, and goats), and this number rose to about 15 million in 1990. Consequently, the amount of meat produced increased by the same rate. In 1979, the animals slaughtered produced 221 thousand tons of meat while in 1990, meat production

⁴ Olive trees produce an abundant harvest once every two years due to their botanic nature.

more than doubled to 544 thousand tons.

Table 6.6 shows that the poultry industry has grown rapidly in Turkey in the last decade. The number of hens and roosters increased from about 53.7 million birds in 1979 to about 96 million in 1990. The main stimulus for this expansion came from the World Bank's livestock development projects, the Turkish Development Foundation (TKV), and the Turkish private sector. Most of the major operators have hatcheries from which they export a significant amount of their production. Unfortunately, there are no available figures for the poultry export activities (British Agricultural Export Council, 1986).

Fish farming is also a growing industry in Turkey; especially fresh water fish which had almost doubled its production by 1990 in comparison to 1979. However, the fish industry is still limited with exports at an annual average of US\$ 50 million with the supply lagging behind domestic demand. Meanwhile, it is expected that fresh water fish production will undergo more expansion due to the South Anatolia Project (GAP) which will create a huge lake behind the Ataturk dam (the GAP project will be discussed in more detail in the last section of this chapter) which will provide a major boost for the industry.

6.5 The Turkish Agro-industry

Until 1980, the private sector involvement in agro-industry did not go far beyond flour milling and baking, brewing, animal feed milling, tomato canning, vegetable oil extraction, and dairy processing. Since then, it has expanded considerably, mainly in red meat processing. The public sector dominated the livestock, sugar, animal feed, and tobacco industries. After the 1980 reforms and with the

Table 6.6: Livestock Figures in Turkey (thousand)

	1979	1984	1985	1986	1987	1988	1989	1990
No. of Animals	83,886	68,522	70,866	72,431	72,048	73,240	70,040	64,992
of which								
Sheep	46,026	40,391	42,500	43,758	43,796	45,384	43,647	40,553
Cattle	15,567	12,410	12,466	12,713	12,713	12,562	12,173	11,377
Goats	14,752	11,127	11,233	11,295	11,053	10,972	10,328	9,698
No. of Slaughtered								
Animals	8,721	16,846	14,656	16,225	13,801	12,894	15,385	15,031
of which								
Cattle	-	1,447	1,317	1,764	1,362	1,379	1,696	1,806
Sheep	-	6,941	6,228	5,620	4,794	4,299	6,452	5,595
Goats	-	1,560	1,371	1,786	1,629	1,453	1,454	1,437
Meat Production (tons)	221	363.9	310.4	357	294	272	544	544
of which								
Cattle	-	118.1	99.6	125.7	100.5	97	214	232
Calf	-	47	36	57.1	40.7	33	123	127
Sheep	-	116.7	105.2	92.2	77.9	70	119	103
Lamb	-	42.7	35.5	40.7	35.9	35	49	53
Milk Production (tons)	5,411	4,380	4,520	4,629	4,589	4,655	-	-
of which								
Cows	3,386	2,805	2,900	2,974	2,959	2,976	-	-
Sheep	1,102	981	1,024	1,055	1,048	1,109	-	-
Goats	571	410	413	417	404	402	-	-
Hens & Roosters	53,709	60,472	61,046	58,039	58,045	58,790	64,078	96,676
Turkeys	2,705	3,288	3,315	3,207	2,946	2,974	3,101	3,127
Sea Fish(tons)	324.9	508.7	520	525.4	562.7	580.7	361.8	294
Fresh water								
Fish(tons)	22.2	46.5	45.5	40.3	41.8	48.5	42.8	37.3

Source: State Institute of Statistics

expansion of the private sector, the public sector is still mainly in control of the tobacco and sugar industries while other fields experienced increasing penetration from Turkish, and sometimes foreign, private companies (British Agricultural Export Council, 1986).

Despite the fact that the value of processed agricultural products exported reached about US\$ 2.2 billion in 1990 (table 6.7) i.e., about 18% of total exports, the sector still has a big potential for development given Turkey's wealth in agricultural raw materials. No part of the agro-industrial market is as yet saturated, with foreign investments still at low levels. The Turkish government believes that much of the investment should come from foreign companies, mainly because some of the operations are quite big. Meat exporters in Eastern Turkey, for example, will need to build stockyards, slaughter houses, packaging plants, and cold stores in an integrated chain (COMET, 1989).

However, recently the Turkish government has chosen agro-industry as a leading sector and offered a package of incentives. Cattle-breeding is to be encouraged by the free allocation of state land. Entrepreneurs engaged in food production, processing, and manufacture will benefit from a 50% reduction in the tariff of electricity and other sources of energy which they use. Their employees will be exempt from check-offs for compulsory savings and housings. In the three development areas (east, south-east, and Black sea regions), agro-industrialists will be exempt for five years from corporation tax, customs duties, and fund levies on their imported inputs, and VAT on their home-manufactured farming equipment. They will also obtain cheap credits for investments. In the south-east region, tax exemption will extend over 10 years, and the reduction in electricity charges will amount to 75%

in the first year. The Agricultural Bank (Ziraat Bankasi) will have an additional TL 150 billion to dispense in credits. Furthermore, the implementation of two of the government's electoral promises (the exemption from taxes of the minimum wage and the introduction of unemployment benefit) is to begin in the eastern and south-eastern areas towards the end of the year. The latest two measures are expected to limit the growth in east-west migration (Turkey Confidential, 1992).

6.6 Export Performance

Prior to the January 1980 reforms, the external trade of most agricultural commodities was strictly controlled. Exports were limited through licensing and were often subsidised due to excessive support prices in comparison with world market prices, which was aggravated by an overvalued exchange rate. However, the share of agricultural exports reached 59% of total exports in 1979. In 1991, the success of Turkish manufacturing and its export drive reduced the share of agricultural and livestock products to about 18% of total exports (table 6.8) but it reached about 30% when processed agricultural goods are included.

Table 6.7 demonstrates that the exports of livestock products declined between 1988 and 1990 due to the increasing domestic demand, while forestry logging and fishery products exports were marginal. However, it appears that the exports of processed agricultural products are doing relatively well with rising revenues from canned and preserved fruits and vegetables exports, tobacco and cigarettes, and ginned cotton.

Table 6.7: Sectoral Breakdown of Agricultural Exports (US\$ million)

	1988	1989	1990
Crops	911	589.6	658.4
Livestock	282.4	272.7	210.7
Forestry	27	22.6	26.6
Fishery	49.2	46.9	52.8
Processed Agricultural Products (subtotal)	1,840.6	1,970.9	2,223.7
Slaughtering Products	83.5	72.6	63.1
Canned & Preserved Fruits & Vegetables	501.3	466.7	580.3
Vegetable & Animal Oils & Fats	131.8	209.2	198.9
Grain Mill Products	54.4	52.7	35.9
Sugar	12.5	2.1	1.6
Other Food Products	611.5	510.8	708.9
Alcoholic Beverages	22.8	22.7	16.3
Soft Drinks and Carbonated water	2.1	6	3.6
Tobacco & Cigarettes	269.2	479.8	440.4
Ginned Cotton	151.3	148.3	174.7
Total	3,110.2	2,902.4	3,172.2

Source: Export Promotion Centre.

On the other hand, revenues declined from exports such as slaughtering products, grain mill, sugar, and alcoholic beverages. The exports of these products

declined mainly due to the increasing demand at home and the slow growth in those industries. This applies mainly to sugar where exports declined sharply from US\$ 112.5 million in 1988 to US\$ 1.6 million in 1990.

In tobacco, less than one third of production is used for domestic cigarette production and the rest is exported. The United States is the largest importer of tobacco with a share of 50% in Turkish exports (World Bank, 1982). There is not enough cigarette manufacturing capacity in the country to meet the domestic demand. However, in May 1991, the private sector was allowed to invest in the industry which was mainly a governmental monopoly (OECD, 1992). This development is expected to increase competition in the market which would probably reduce prices and may lead to more exports if production exceeded demand and the quality produced was competitive enough in the world markets.

While Turkey has a large share in world trade of its traditional export commodities, it also faces a small number of large importers. World trade in tobacco is becoming increasingly dominated by a small number of international leaf merchants and large tobacco manufacturers. A similar situation exists in the hazelnuts market, where, although Turkey enjoys a monopoly situation on the producers' side, it is faced with a monopsonistic consumer market dominated mainly by Germany, USSR, and France.

Table 6.8 shows the breakdown of the crops item in Table 6.7. On the whole, Turkish agricultural exports, with the exception of cotton, responded positively to the liberalisation of prices and the export-oriented environment that dominated after 1980. The share of cotton exports to total exports declined substantially (from 10.1% of total exports to 1.5%) between 1979 and 1990. The same phe-

Table 6.8: Exports and Imports of Agricultural Products (US\$ million)

	1979	%*	1985	%*	1986	%*	1987	%*	1988	%*	1989	%*	1990	%*
EXPORTS														
Cereals	169	7.5	234	2.9	246	3.3	266	2.6	441	3.8	315	2.7	342	2.6
Fruits & Vegetables	648	28.7	561	7	820	10.1	800	7.8	867	7.4	789	6.8	1,068	8.2
Hazelnuts	353	15.6	255	3.2	378	5.1	391	3.8	359	3.07	266	2.3	456	3.5
Dried Fruits	166	7.34	73	0.9	177	2.4	208	2	231	2	195	1.7	-	-
Citrus Fruits	53	2.3	58	0.7	74	1	91	0.9	90	0.8	105	0.9	-	-
Others	75	3.3	175	2.2	191	2.6	110	1.1	187	1.6	223	1.9	-	-
Ind. Crops^a	448	19.8	659	8.3	495	6.6	431	4.2	696	6	693	6	667	5.1
Cotton	228	10.1	170	2.1	139	1.8	20	0.2	141	1.2	160	1.4	191	1.5
Tobacco	177	7.8	330	4.1	270	3.6	314	3.1	266	2.3	479	4.1	418.5	3.3
Others	43	1.9	159	2	86	1.1	97	0.9	289	2.5	54	0.5	-	-
Live Animals & Sea Products	84	3.7	265	3.3	325	4.4	356	3.5	337	2.9	330	2.8	272	2.1
Total	1,344	59.4	1,719	21.6	1,886	25.3	1,853	18.2	2,341	20	2,127	18.3	2,349	18.1
IMPORTS	36	-	375	-	457	-	782	-	499	-	1,041	-	1,319	-

- Any discrepancy in the aggregate figures is due to rounding.

(*) Per cent of total exports.

(a) Industrial crops.

Source: OECD, April 1980, 1992, and Turkiye Is Bankasi 1991, 1992.

nomenon occurred in the exports of hazelnuts which may be due to the rise in the share of manufactured products in total exports. Furthermore, exports of hazelnuts dropped by about 17% in 1992 due to the boost in demand in 1991 which reached US\$ 366 million. This boost was due to stockpiling caused by fears associated with the Gulf crisis. In the cotton market, imports increased mainly from the newly established Turkish Republics in the former Soviet Union due to the rise in domestic prices of cotton whereas export prices remained at the same level. This led to a rise in the exportable stock (Turkiye Is Bankasi, 1992).

On the import side, it is clear that agricultural imports increased tremendously during the 1980s due to trade liberalisation. The rise in imported agricultural products occurred mainly in crops and livestock. The crop item included goods such as pineapples and coconuts which are not produced in Turkey, thus the need to import them (Economist Intelligence Unit, 1992-93).

The expectations of the World Bank's simulation model were right with respect to the growth in the exports of tobacco, fruits, vegetables, and livestock after liberalisation. However, to compare the growth rates of these products with their historical rates, as the model suggests, is difficult and beyond the purpose of this study.

6.7 Agricultural Exports and the EC Common Agricultural Policy

When the common agricultural policy (CAP) was agreed in 1962, the primary objective of the EC Commission and the six member states then was to attain self-sufficiency in food production. They also had other priorities such as a fair standard of living for farmers, stabilised markets, secure supplies of food, and

reasonable prices for consumers.

By 1992 and with the Community enlarged to 12 member states, the common agricultural policy was considered quite successful in ensuring sufficiency of food supply. This success was reflected in the increasing volume of stored food surpluses such as cereals, dairy products, and beef.

The self-sufficiency in food production required imports into the Community to be controlled not only by tariffs but also, in the case of most products, by the system of variable levies established under CAP to protect domestic producers. The system of setting minimum prices for imports through variable levies, which had a much stronger impact than tariffs, prevented agricultural exporters to the EC from undercutting and so lowering Community prices. On the other hand, the Community was buying up output to reduce quantities in the market and so deliberately raised agricultural prices. This system covered a wide variety of goods; especially Mediterranean agricultural items, which were produced in the EC. The items included in this system were divided into two categories: the so called low vulnerability items and high vulnerability items. The former consists of goods that are produced in the EC in insufficient quantities while the latter consists of goods that are produced in the EC in sufficient quantities to meet the demand.

The impact of CAP on Turkey's agricultural exports may be considered partially negative. For on one hand, many of Turkey's major agricultural products are considered in the low vulnerability category and hence faced less protectionary policies by CAP. On the other hand, some agricultural products faced difficulties in penetrating the EC markets with Greece, Spain, and Portugal as major suppliers of Mediterranean agricultural products to those markets, thus rendering Turkish

goods in the high vulnerability category.

The best example of Turkish low vulnerability items is hazelnuts which is produced in limited quantities in the EC, in addition, Turkey exports under the same category sultanas, dried figs, and lentils. The high vulnerability category includes items such as melons, lemons, olive oil, and some vegetables. Turkey is fortunate that its traditional agricultural exports (hazelnuts, dried figs, ...etc.) are in the low vulnerability category. However, citrus fruits and some vegetables are facing protectionist policies by the EC under CAP which obliged Turkey to turn to other markets such as the Middle East to export its agricultural products.

On the whole, Turkey is in a much better position with respect to its agricultural trade with the EC under CAP in comparison with other countries such as Cyprus and Morocco who mainly export citrus fruits. But if the common agricultural policy was not there, it is expected that Turkey would have a bigger trading share with the EC than it currently has.

6.8 Changes in the Prices of Agricultural Products

The Turkish government is still implementing its price support policy which it followed before 1980 despite the liberalisation and rationalisation measures adopted. The government continues to set prices for major agricultural products such as wheat, tobacco, hazelnuts, tea, sugarbeet, ...etc. with the exception of fruit and vegetables. It intervenes in the marketing of the former crops through its state economic enterprises: the Soil Products Office or TMO, for cereals and pulses, and the Sugar Factories Corporation (TSF) for sugarbeet, state monopolies for tea and tobacco, and it authorises the sales co-operatives to purchase on its behalf, at sup-

port prices, other agricultural products (cotton, dried fruits, nuts, vegetable oil, ...etc.). Other SEEs which also purchase at support prices include the Meat and Fish Organisation (EBK), and the Milk Industry Organisation (TSEK), but their support activities are limited to the small quantities they buy and process which reaches about 10% of total meat and milk production (British Agricultural Export Council, 1986).

The government exercises varying degrees of control over different crops and at different levels in the marketing chain. It has a complete monopoly over the manufacture and distribution of sugar, tea, and their products. More generally, however, the state control takes the form of partial market intervention by the state trading agencies. These agencies have the tasks of purchasing products from farmers (according to the prices set by the government), storage, sales, and the export of commodities under government control (World Bank, 1982).

The selling prices of agricultural products were often set below cost, before 1980, with the government absorbing the losses in order to limit the rise in consumer prices. However, the policy caused increasing pressures on the budget and consequently the budget deficit which often led to an expansion in the money supply; thus increasing consumer prices (inflation) indirectly. Since 1980, authority has been granted to most SEEs to set sale prices according to actual costs which meant the abolition of subsidies on some agricultural products and their reduction on others.

Table 6.9 shows that an upward trend in the prices of Turkish agricultural products was witnessed between 1985 and 1990. This trend is also clear in figures

Table 6.9: Prices of Turkish Agricultural Products Received by Farmers
(TL/kg)

	1985	% ^a	1986	% ^a	1987	% ^a	1988	% ^a	1989	% ^a	1990	% ^a
Cereals^b	87.8	-	125.2	42.6	172.9	38.1	231.5	33.9	-	-	-	-
of which												
Wheat	61	-	77	26.2	92	19.5	151	64.1	320	112	497	55.3
Barley	51	-	63	23.5	79	25.4	132	67	269	103	427	58.7
Pulses^b	192	-	282.6	47.2	357.77	26.6	422.3	18	-	-	-	-
Vegetables^b	121	-	173.6	43.5	231.3	33.2	333.8	44.3	675.3	102	1,058	56.7
Ind.^c Crops^b	227.7	-	414.5	82	659.6	59.1	959.9	45.5	-	-	-	-
of which												
Tobacco	1,019	-	1,486	45.8	3,219	116.6	5,954	84.9	-	-	-	-
Cotton ^d	234	-	355	51.7	572	61	718	25.5	1,324	84.4	1,921	45
Sugarbeet	13	-	17	30.8	23	35.3	45	95.6	65	44.4	112	72.3
Sunflower	148	-	181	22.3	220	21.5	347	57.7	804	131.7	1,301	61.8
Fruits^b	186.6	-	260.6	39.6	404.6	55.2	618.5	52.9	1,276	106	2,082	63
of which												
Hazelnuts	493	-	668	35.5	1,065	59.4	1,648	54.7	2,190	32.9	2,885	31.7
Pistachio	1,072	-	1,446	34.9	2,194	51.7	3,359	53.1	6,517	94	10,048	54.2
Figs	123	-	195	58.5	321	64.6	480	49.5	835	74	1,359	62.7
Olive	93	-	389	318.3	786	102	1,416	80.1	2,643	86.6	5,915	123.8
Grapes	122	-	140	14.7	263	87.8	351	33.5	876	150	1,309	49.4
CPI (%) ^e		45		34.6		38.8		75.4		69.6		63.6

a = Percentage change over previous year.

b= Average price.

c= Industrial.

d= Aegean Std. I.

e= Consumer price change over previous year.

Source: Turkish Agricultural Bank and State Institute of Statistics.

6.1 and 6.2⁵. Most agricultural prices in 1990 rose by more than fivefold compared to 1985 i.e., an average annual increase of about 100%. The products that had the sharpest increase were cereals, industrial crops, and fruits at the category level. At the commodity level, sugarbeet, sunflower, figs, and olives had the highest increase. The products that witnessed an increase in prices higher than the inflation rate were olives and sugarbeet only. It is noticed from table 6.9 that, in general, the prices of many agricultural products rose by less than the rate of inflation which leaves farmers worse off. However, the Turkish government compensate farmers through different subsidies granted mainly by the Agricultural Bank.

In 1992, the cotton harvest is estimated to be around 606 thousand tons, 8% higher than the previous year owing to good weather conditions. The minimum purchase prices were announced as between TL 5,600 - 6,200 and TL 5,350 - 5,950 per kilo for Aegean and Cukurova cotton respectively. Also, in 1992, the hazelnut harvest was higher than in 1991. The 1992/93 harvest is estimated at 530 - 540 thousand tons compared to 460 thousand tons for 1991. The price of hazelnut was declared as TL 9,000 per kilo to be raised by TL 300 every month compared to about TL 5,600 per kilo in 1991 (Turkiye Is Bankasi, 1992).

Figure 6.1 demonstrates a slow divergence from the 1985 price level of cereals, pulses, and vegetables. But in 1987, the price gap between cereals and vegetables widened due to the overall sharp increase in the prices of the latter. In figure 6.2, the prices of fruits and industrial crops are clearly increasing at rates higher than any other agricultural product. The main reasons for the rise in Turkish agricultural products are inflation and the devaluation of the lira, with the latter

⁵ The graphs show the changes in the price of agricultural products by category until 1988 only due to the lack of data after that period.

Figure 6.1 : Price Changes in Selected Agricultural Products (TL/kg)

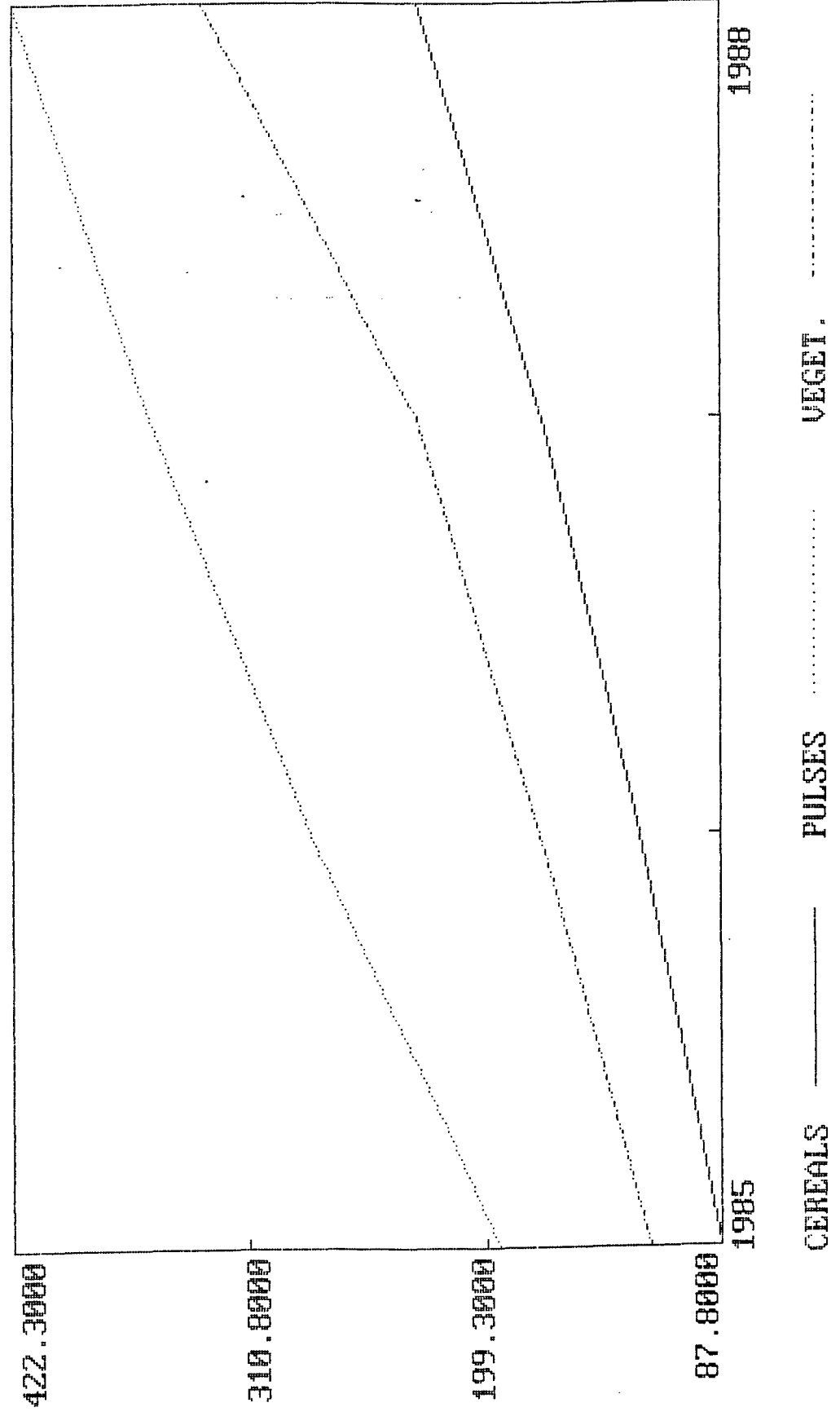
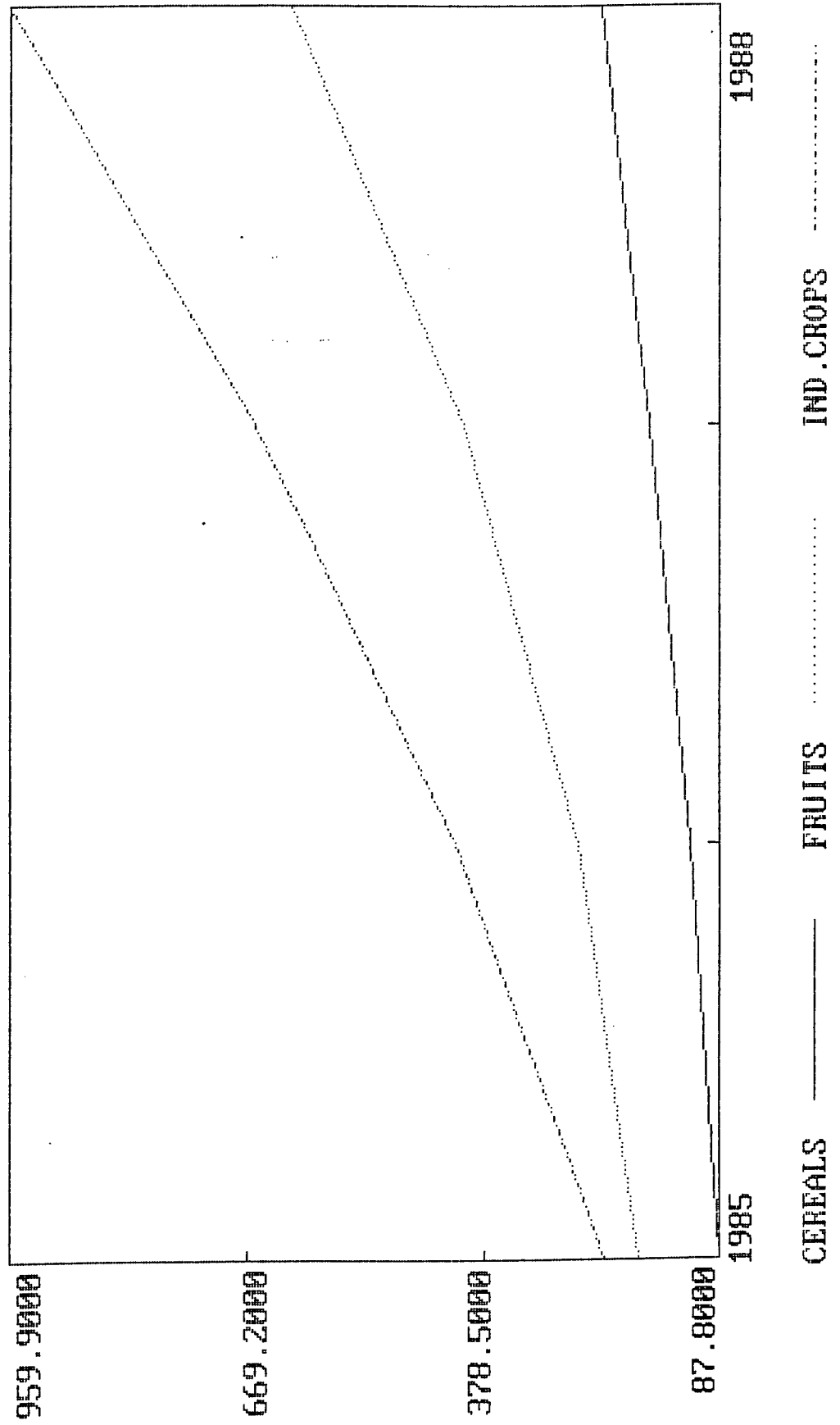


Figure 6.2 : Price Changes in Selected Agricultural Products (TL/kg)



increasing the prices of imported inputs (seeds, fertilisers, machinery spare parts, ...etc.) which raise the cost of production with inflation raising the cost of labour, transport, and packaging. The rise in the prices of agricultural products reduces the demand at home and although this makes more goods available for exportation, it is not necessary that exports will increase because the increasing costs erodes the competitiveness of Turkish agricultural products.

6.9 Agricultural Inputs

The main inputs used by Turkish farmers for their agricultural activities are fertilisers, machinery, credits, and water. Seeds and labour are of secondary importance and I will touch on them later in the chapter. In what follows, the four main agricultural inputs will be discussed in detail.

6.9.1 Fertilisers

Before 1980, fertiliser consumption increased rapidly because farmers purchased this input at low subsidised prices. This created excess demand and a non-price allocation mechanism was used to distribute fertilisers to the farmers. There was an uneven distribution of available supply and some regions (Mediterranean, Aegean, and Marmara) were more favoured than others (northern and southern areas). Also, import-substitution crops were benefiting from this system more than others.

With the liberalisation of prices and the removal of subsidies on fertilisers, it was expected that the demand would remain more or less the same but there would be more efficient use of this input. Table 5.10 shows the different amounts of

fertilisers used in the 1980s, the area of fertilised land, and the amount of fertilisers used per thousand hectare.

The total amount of fertilisers used increased by about 20% between 1982 and 1990 with the area of land fertilised increasing by about 15% during the same period (this period was chosen for comparison due to the lack of data on the area to which fertilisers were applied after 1988). However, the amount of fertilisers used per 1,000 hectares decreased in the 1980s. Turkish farmers used 499 tons per 1,000 hectares in 1982 and were encouraged to reduce that amount to 475.4 tons in 1988 as a result of the rationalisation of prices. The reduction in the amount of fertilisers used per 1,000 hectares and the rise in the yields (see table 6.3) demonstrates that there was a more efficient use of fertilisers after 1980 and that there was over-use and waste during the subsidisation era or that the quality of fertilisers improved after 1980.

Table 6.10: Fertiliser Use (1,000 tons)

	1982	1983	1984	1985	1986	1987	1988	1989	1990
21 % Nitrogen	4,034	4,718	4,754	4,383	4,538	5,435	5,149	5,429	5,711
16-18 % Phosphorous	3,350	3,635	3,380	2,800	3,056	3,440	2,881	3,523	3,671
48-52 % Potash	66	49	62	67	94	101	83	116	126
Total	7,451	8,402	8,197	7,251	7,690	8,977	8,114	9,069	9,508
Area Fertilised ^a	14,922	15,948	16,220	15,159	15,570	16,595	17,067	-	-
(1)	0.55	0.60	0.59	0.55	0.72	0.76	0.75	-	-
(2)	499	526.8	505.4	478	493.9	540.8	475.4	-	-

a = in thousand hectares.

(1) Proportion of area fertilised to cultivated area.

(2) Amount of fertilisers used (in tons) per 1,000 hectares.

Source: State Institute of Statistics.

6.9.2 Machinery

An important characteristic of Turkey's agricultural development has been the high capital intensity associated with the use of heavy farm machinery and large irrigation projects. Those three elements received generous government incentives in the form of direct subsidies to tractors, low interest rates on credits, and low water charges. The growth of farm machinery has been rapid as the total number of tractors increased from about 441 thousand in 1979 to 673 thousand in 1989, i.e., more than 50% increase. This rise in the number of tractors used may be attributed to the subsidised loans given by the government for their purchase and the increasing efficiency and productivity of the Turkish agricultural machinery industry. Moreover, the importance of equipment associated with labour-intensive techniques of farming like wooden ploughs, threshing sleds, fanning mills, and seed cleaners declined at an annual rate of 10-15%. Hence, the ratio of capital to labour in the cereal producing areas, for example, increased from US\$ 3 to more than US\$ 100 per man-year in the last three decades.

6.9.3 Agricultural Credits

In the last decade, agricultural credits rose sharply from about TL 194 billion (in 1979) to about TL 18,400 billion in 1990 (see table 6.11). The share of those credits in the total volume of credits declined during the seventies (23% in 1971, 22.6% in 1975, and 20% in 1980). However, this share increased in the 1980s to reach more than one third of total credits. On the other hand, the share of agriculture in GDP was not affected by the increasing inflow of capital and continued to decline, mainly due to the faster growth occurring in other sectors; especially

industry. This poses a question about the efficiency of capital used in the agricultural sector in comparison to other sectors, whether there is waste, or whether capital in agriculture reached the stage of diminishing returns to scale.

The agricultural credits comprise credits to public enterprises which intervene in the market by guaranteeing agricultural support prices; credits granted by agricultural sales co-operatives and financed by the Agricultural Bank; and other types of credits granted by credit co-operatives and financed mainly by the Agricultural Bank or commercial banks. In most cases, the credits financed by the Agricultural Bank and deposit money banks are refinanced by the Central Bank at very low rediscount rates.

Table 6.11: Agricultural Credits (TL billion)

	1979	1985	1986	1987	1988	1989	1990
Agricultural Bank	42.5	741.8	1,248	2,235	2,763	4,144	5,986
Credit Co-operatives*	27.8	387.5	632.5	1,055	1,625	2,424	4,128
Sales Co-operatives	122.7	587.3	1,264	1,549	2,869	5,356	9,276
Seed Credits	0.9	9.9	13.6	27.8	25.1	28.8	68
Total	193.9	1,726.5	3,158	4,867	7,282	11,953	18,392

(*) Credits given by the Agricultural Bank through Credit Co-operatives.

Source: State Institute of Statistics (rounded figures).

Table 6.12 demonstrates that the amount of the interest rate subsidy on agricultural credits financed by the Central Bank through credit co-operatives diminished throughout the 1980s while this subsidy was, more or less, the same on credits financed by the Turkish commercial banks in the last decade. However, in both cases, the subsidy was much higher compared to the end of the 1970s. The system

of subsidisation involves important negative consequences that create distortions in the Turkish money market.

Table 6.12: Interest Rates on Agricultural Credits
(% per annum)

	1979	1985	1986	1987	1988
Central Bank					
<i>Short-term Credits</i>					
General	10.75	52	48	45	54
Agricultural Credits	10.4-11.25	-	-	-	-
Credit Co-operatives	-	28	28	28	40
Sales Co-operatives	-	46.5	46.5	45	54
Commercial Banks					
<i>Short-term Credits</i>					
General	16	62	60	66	87.9
Agriculture	14	30	30	36	-
<i>Medium-term Credits</i>					
General	20	62	58	62	92.5
Agriculture	16	30	30	30	-

Source: OECD, March 1981 and 1990/1991.

First, the fact that it was based on cheap Central Bank credits meant that the demand for these credits may not be met by the available supply of savings. This created conflicts with the objectives of the monetary policy concerning the restriction on money supply expansion in the 1980s, which is part of the adjustment package. Second, borrowers will try to get more credit than they need for their agricultural operations leading to leakages into other uses. Third, the pressure

on credits from the agricultural sector would deprive other sectors of the capital they needed for their development which would oblige them to borrow from other sources such as unorganised markets or foreign banks at very high rates.

For the reasons mentioned above, there is a need to eliminate the subsidy on agricultural credits in order for it to be used more efficiently by farmers and eliminate the distortions in the money market.

6.9.4 Water Charges

Users of water for irrigation in Turkey are expected to pay full capital costs (over 50 years with no interest) in addition to operation and maintenance costs of irrigation projects built by the government. The former are calculated after the completion of the project and the users are billed annually; the latter are estimated every year. However, the government does not cover all costs of the irrigation projects due to: (i) inflation which erodes the non-inflation adjusted real value of the collected charges, (ii) the maintenance charges are not well prepared to cover all operational and maintenance costs, and (iii) there is evasion from payment leading to collection rates lower than estimated (World Bank, 1982).

However, with the rationalisation of prices after 1980, water charges have risen; but the problem of uncovered costs is still unsolved with its burden on the government's budget. Therefore, there is a need to change the existing system of payment which is based on charges per decar into a system based on volumetric charge proportional to the amount of water used by the farmer. This would limit the waste in water use, increase the efficiency of irrigation, and may increase the area of land irrigated by diverting the surplus in water (formed under the new

system) to new lands (World Bank, 1982).

6.10 Employment in Agriculture

Table 6.13 shows that despite the increasing Turkish population, from about 40 million in 1975 to about 60 million in 1990, the share of agricultural employment declined from 67.27% of total employment to 45%. This decline may be attributed to several reasons.

Table 6.13: Agricultural Employment (thousand)

	1975	1980	1985	1990
Total Population	40,347	44,736	50,664	56,100
Economically Active Population	17,383	18,522	20,556	23,063
Total Economically Active Population in Agriculture*	11,694	11,104	12,118	10,283
Agriculture and Livestock	11,650	10,993	12,037	-
Forestry and Logging	28	91	58	-
Fishing	14	19	22	-
Share of Agricultural Employment in Total Employment (%)	67.27	59.95	58.95	44.6

(*) The discrepancies in the figures are the responsibility of the source.

Source: State Institute of Statistics.

First, despite the fact that the share of agriculture in GDP declined, the area of land sown increased, however, the increasing mechanisation of Turkish agriculture reduced the demand for labour. Second, the migration of Turkish workers to Europe, mainly Germany, had its adverse effects on the agricultural labour force

although it had some positive effects on the rural community as a whole through the transfer of hard currency by the migrant workers to their home villages. Third, rural migration reduced agricultural employment as better health and education services in urban areas attracted young Turkish farmers. This led to a decline in the ratio of rural population to total population from 47% in 1985 to 41% in 1990 while the urban population share rose from 53% to 59% during the same period according to the 1990 census of population.⁶ Fourth, better wages in the cities and other non-agricultural sectors (see table 6.14) may be considered among the important factors leading to the decline in the share of agricultural employment. Table 6.14 demonstrates that the wage difference between the agricultural sector and other sectors, mainly industry, widened in the 1980s to the obvious disadvantage of agricultural workers. In addition, although 46% of the labour force is engaged in agriculture, the income received is only 25% of the total. Thus, agricultural workers receive the lowest pay in the country according to the 1990 census of population. Finally, the lack of investment in the agricultural sector and subsectors (see next section) compared to other sectors such as manufacturing and services contributed to the transfer of agricultural workers.

⁶ It must be mentioned that the definitions of urban centres and villages vary with each census due to the change in the administrative law, hence leading in some cases to misjudgements if one relies completely on the census data.

Table 6.14: Changes of Daily Wages in Agriculture and Other Selected Sectors (TL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture	521.11	658.77	930.77	1,277	-	-	-	7,019	11,034	28,922
Fishing	505.19	669.37	890.78	1,222	-	-	-	5,252	10,308	23,709
Chemicals	614.96	773.55	1,071	1,479	-	-	-	11,971	24,422	46,728
oil & Coal	652.22	828.44	1,165	1,591	-	-	-	16,325	35,829	51,742
Non-metallic Products	561.58	714.27	960.58	1,318	-	-	-	9,038	18,237	35,769
Trade	465.79	592.93	793.71	1,198	-	-	-	8,109	10,872	23,574
Banks	569.4	773.84	990.53	1,304	-	-	-	10,397	20,423	43,502
Rubber Products	559.58	704.45	930.13	1,323	-	-	-	10,774	7,905	35,329

Source: State Institute of Statistics.

6.11 Investment in Turkish Agriculture

The growing importance given to non-agricultural sectors in the investment promotion policies is revealed by the sectoral distribution of investment certificates issued by the State Planning Organisation (SPO). Table 6.15 shows that the share of subsidised agricultural investment in total expenditure for investment aid given by the government increased from 0.72 per cent in 1986 to 1.5 per cent in 1991. Other sectors such as services and manufacturing had the largest shares of investment certificates which allowed them to benefit from the government's incentives more than any other sector because the incentives were directed at them. On the other hand, it is true that the Turkish Agricultural Bank offers subsidised credits to farmers, but those credits which increased substantially in the 1980s were not enough to boost agriculture and increase exports.

Table 6.15: Sectoral Distribution of the value of Investment Certificates (TL billion)

	1986	%*	1987	%*	1988	%*	1989	%*	1990	%*	1991	%*
Agrc.	37	0.72	164	2.4	126	1.1	509	2.6	2,399	10.6	575	1.5
Mining	305	5.94	519	7.6	232	2	529	2.7	618	2.7	1,365	3.6
Manuf.	1,986	38.7	2,755	40.3	5,739	49.2	9,361	48.3	15,578	68.8	23,858	62.6
Energy	207	4.03	642	9.4	1,079	9.3	365	2	462	2	1,647	4.3
Services	2,593	50.55	2,755	40.3	4,476	38.4	8,612	44.5	3,588	15.8	10,686	28
Total	5,129	-	6,837	-	11,653	-	19,376	-	22,645	-	38,131	-

Source: Turkiye Is Bankasi.

(*) Percentage share in total value of investment certificates.

Turkish agriculture needs more investment in the agricultural subsectors such as packaging and more export incentives (which may be based on cheaper seeds and fertilisers) to farmers who achieve a certain level of exports, and/or production per hectare. On the other hand, table 6.16 demonstrates that the private sector investment in agriculture ranked fifth in terms of its share in total investment in 1990, while the public sector investment share ranked third. Sectors that are attracting most of the private investment capital are housing, manufacturing, transportation, and tourism while the public sector's main investment areas are transportation and energy.

Finally, Turkey has embarked on a huge agricultural investment, the South Anatolia Project (GAP) which is expected to boost agricultural production tremendously and meet the domestic demand for these goods in addition to enhancing the potential to export. This project will be dealt with in detail later in the chapter.

Table 6.16: Gross Fixed Investment by Sector

	1989		1990		Percentage Volume Change Over Previous Year						
	TL billion	Share(%)	TL billion	Share(%)	1986	1987	1988	1989	1990	1991 ¹	1992 ²
Private Sector											
Agriculture	822.7	3.9	1,768	4.8	- 12.2	20.5	- 12.3	- 25.7	46.1	- 6.7	20.4
Mining	285.8	1.4	445	1.2	7.9	35.1	7.7	2.1	5	0.8	6.5
Manufacturing	4,381	20.9	10,016	27.8	13.9	- 4.2	0.7	- 4.3	63.7	- 5.1	7.5
Energy ⁴	359.5	1.7	571	1.6	145	- 7.2	65.8	29.4	10.9	13.5	11.9
Transportation	2,321	11.1	4,651	11.8	- 5.9	3.9	- 5.5	- 0.7	55	9	13.4
Tourism	1,356	6.5	2,246	6.2	61.8	48.2	44.4	37.8	9.9	- 3.8	3.1
Housing	10,412	49.7	15,008	41.6	36.7	44.6	29.2	6.3	- 8	- 8.1	1.5
Education	113	0.5	210	0.6	35.1	27.5	5.5	27	24.6	11.7	9
Health	132.8	0.6	317	0.9	44.5	20	- 17.6	51.3	58.9	62.9	31.6
Other Services	767	3.7	1,251	3.5	8.6	8.5	3.9	4.5	12.5	1.6	5.2
Subtotal	20,953	100	36,483	100	16.4	18.6	13.5	3.3	19.2	- 3.1	6.9
		(54.7 ³)		(56.5 ³)							
Public Sector											
Agriculture	1,787	10.3	2,664	9.5	13.6	26.7	- 3.8	6.3	- 5	11.9	- 8.4
Mining	550.5	3.2	948	3.4	- 27.5	- 44.2	- 7	- 33.2	12.6	- 1.3	11
Manufacturing	788.2	4.5	1,257	4.5	- 19.8	- 40.3	- 25.7	- 27.6	5.8	16.9	3.3
Energy ⁴	5,177	29.8	6,008	21.4	14.2	- 8.7	- 2.1	4.2	- 21.9	- 10	- 0.8
Transportation	5,189	29.9	9,595	34.1	13.9	10.4	- 23.4	- 3.6	22.1	7.5	- 12.1
Tourism	184.6	1.1	362	1.3	141.6	- 10.1	- 17.6	- 33.3	26.2	19.3	13.6
Housing	323.6	1.9	1,115	4	- 9.4	- 23.9	3.8	- 1.9	122.3	- 58.1	- 32.8
Education	1,092	6.3	1,958	7	5.6	27.6	3.3	2.8	23	- 15.3	54.5
Health	374.4	2.2	777	2.8	15	26.7	4.2	16.9	38.6	0.8	39.1
Other Services	1,883	10.9	3,412	12	41	5.8	- 20.9	- 24.5	25.7	22.7	26.3
Subtotal	17,351	100	28,096	100	7.5	- 3.7	- 13.7	- 5.8	7.9	1.9	2.9
		(45.3 ³)		(43.5 ³)							
Total	38,304	100	64,580	100	11	5.4	- 1.3	- 1	14.1	- 1	5.2

(1) Provisional, (2) 1992 programme, (3) Share in total investment, (4) Electricity, gas, water.

Source: OECD, 1990/1991 and 1992 (figures discrepancies are due to rounding).

6.12 Land Ownership

Turkey's agricultural land is characterised by the small size of holdings which range between 10-500 decars (1-50 hectares) as table 6.17 demonstrates. About 70 per cent of the holdings is in the range of 50 to 500 decars (5-50 hectares). The small sizes of land, which may be due to the inheritance laws in Islam or the low income of Turkish farmers, prevents the efficient use of machinery. However, the number of tractors used has increased enormously in the last three decades from about 40 thousand tractors in 1960 to 673 thousand in 1989. This raises the question of whether this huge expansion in the machinery used is of any economic significance in terms of the capital-output relationship (results of the production function). Since the sector is relatively sufficient in resources (inputs) it may be unwise to over-use capital (machinery) which will deprive other sectors of this factor, which they may desperately need for development.

Table 6.17 shows that the average size of the family farm is about 72 decars (total area divided by the number of holdings) i.e., 7.2 hectares, considered quite small for efficient mechanised agriculture (World Bank, 1982). Certain measures should be taken by the government to change the existing situation. These measures may include cheaper seeds, cheaper fertilisers, and subsidised loans for machinery to farmers who merge their land holdings. These incentives may be applied starting from a minimum land area and may be progressive according to the land size after merger.

It is not surprising that areas with population over 5,000 have a lower number of land owners, compared to areas with population less than 5,000, due to the occupation of the area by other activities such as industrial plants, commercial

Table 6.17: Size of Land Holdings ('000 decars)

	Number of Holdings ¹	Total Area
Places with population less than 5,000		
Less than 5	174	437.3
5 - 9	230	1,530
10 - 19	484	6,531
20 - 29	447	10,240
30 - 39	381	12,312
40 - 49	287	12,110
50 - 99	722	47,338
100 - 199	411	52,979
200 - 499	186	49,924
500 - 999	25	16,658
Total	3,345	210,059
Places with population 5,000 and over		
Less than 5	44	114.5
5 - 9	36	235.7
10 - 19	43	565.3
20 - 29	24	532.1
30 - 39	13	417.3
40 - 49	13	531
50 - 99	17	1,054
100 - 199	11	1,266
200 - 499	7	1,792
500 - 999	0.2	103.8
Total	207	6,613

(1) In thousands.

* Hectare = 10 decars.

- 1980 census of agriculture, rounded figures.

Source: State Institute of Statistics.

centres, and residential estates. On the other hand, the occupation of the area with other non-agricultural activities may oblige farmers to give up their land and work on these new sites.

6.13 Problems Facing Turkish Agriculture

Agriculture in Turkey has not been able to achieve its potential due to several problems. There is a need to improve drainage in the irrigation systems, a problem that is now recognised and one that the government is trying to solve. However, until now the government has not put any efforts into land reclamation and erosion control in central Anatolia despite scattered projects to use trees and windbreaks to reduce soil losses. In addition, much of central Turkey's arable land has the potential to become a dust bowl; thus there is an urgent need to solve this problem before it is too late. On the other hand, the number of tractors and other agricultural machinery are quite large, the fact that most agricultural land holdings are small requires small size machinery and equipment for the use of small farmers. Moreover, farmers in Turkey require more technical and extension services (British Agricultural Export Council, 1986).

On the input side, Turkey has a shortage of seeds supply both in terms of quality and quantity. Therefore, despite domestic efforts to establish a seed industry, the country continues to rely on imported products despite the increase in output and improving quality of local production. Thus, a rise in the quantity and quality of Turkish seeds will lead to less reliance on imported inputs, which will reduce the pressure on the foreign exchange reserves. Moreover, Turkish farmers face difficulties in building green houses due to high tariffs imposed on the inputs (plastics and

shade netting) of those projects. It may be economically viable to lift the tariffs on these inputs since the crops grown in these houses (such as tomatoes used by agro-industrial companies for the production of tomato paste) may be exported.

Finally, a major problem that faces agricultural exports is the transport sector which is the obstacle to increases in the production and exports of fresh fruits and vegetables particularly in the early season (Turkey has a comparative advantage in vegetable growing in the southern regions which border the Mediterranean) when the availability of adequate and timely transportation is crucial. More than half of the fruit and vegetable exports are transported by road to commercial centres in the Middle East and Europe (both East and West). Government regulations do not permit foreign transport companies to enter the Turkish market. Thus, protected Turkish transport companies enjoy a monopoly status and charge high rates. Another problem facing Turkish exporters is the high price and poor quality of packaging which erode their competitiveness in terms of higher costs and the quality of packaging that lags behind European standards (World Bank, 1982).

6.14 Aid to Agriculture

The main source of foreign aid to agriculture is the World Bank. Over the recent years there has been a whole series of projects supporting the livestock industry and its development. Other areas of support include cereal storage, horticultural production and export marketing, fertiliser plant modernisation, and forestry production. Moreover, there are projects of a smaller scale, compared to the World Bank's projects, carried out by the FAO and include vaccine production plants for livestock and poultry.

6.15 The South Anatolia Project (GAP)

The South Anatolia project or GAP (the Turkish acronym for the project) is the largest public investment ever realised by Turkey. It started as an irrigation and energy project in the 1960s. After 1984, it was turned into a multipurpose development programme comprising dams, hydroelectric power plants, and irrigation facilities to be built on the Tigris and the Euphrates. In addition the project will have an impact on the development of sectors such as health, education, transportation, communication and others.

GAP is a combination of 13 large projects on irrigation and energy in the south east of Turkey. It includes 21 dams among which the largest is The Ataturk dam (the key feature of the project), and 17 hydroelectric power plants on the Tigris, Euphrates and their tributaries. The total cost of the project is estimated to reach US\$ 21 billion and completion is envisaged for the year 2005. The project covers the provinces of Adiyaman, Batman, Diyarbakir, Gaziantep, Mardin, Bitlis, Sanliurfa, and Sirnak. The combined surface area of these provinces is 75,958 sq. kilometers i.e., 9.4 % of the total surface area of Turkey. The population of the region, according to the 1985 census, is about 4.3 million and makes up 8.5% of Turkey's total population. It is expected that by year 2005, the population of the region will reach nearly 8 million comprising no less than 10% of total population. Meanwhile, it is expected that the phenomenon of out migration will be reversed and people living in the region's towns will comprise 92% of the region's population. Agricultural employment is expected to reach 3 million representing an 80% increase above the present figure (table 6.18). With the completion of all the units in the project, the annual hydroelectrical production in the region will

reach 27 billion kwh representing 22% of the total hydroelectrical power potential in Turkey. As a result, Turkey's dependence on imported oil for power generation will be substantially diminished reducing the import bill.

The aims of GAP may be summarised as follows:

- The improvement of the economic infrastructure of the region and the achievement of higher income levels.
- Increasing production and employment opportunities in the agricultural sector.
- Increasing employment opportunities in the urban areas of the south east; thus, reducing rural migration.
- Better utilisation of resources, achievement of sustained economic growth, and an increase in the export potential of the region.

Table 6.18: Present Situation and Targets of GAP

	1985	2005
Gross Regional Product (TL billion)	8,442	31,750
Population (thousands)	4,304	7,809
Employment (thousands)	1,528	2,796
Per Capita Income (Regional) in thousand TL, 1990 prices	1,962	4,061

Source: G.A.P Regional Development Administration.

When the South Anatolia project is completed in 2005, it is estimated that more than 1.5 million hectares of land will be irrigated, almost doubling agricultural production and more than doubling the agricultural value-added in the

region (table 6.19). The increase in production will enable Turkey to feed 80 million people and increase its national income by 12% higher than it would have been without the project.

As mentioned above, GAP is not limited to energy production and irrigation alone. It is expected that with the cultivation of more land due to the increase in irrigated area, agricultural subsectors will also flourish. Changes will occur not only in agriculture but in the regional economy as a whole attracting investments in infrastructure, canned food, storage, integrated animal husbandry, textiles and textile machinery, farm equipment, chemicals, weaving, clothing, knitwear, and tourism. It is expected that the agriculture-based industries in the region will be producing four billion dollars exportable surplus in 2005.

The two features (financing and construction) of the project being mainly Turkish is one of the sources of pride that the government has about GAP. Financing of the project is mainly from domestic sources with only about 25% foreign. In addition, the main construction is also entrusted to ATA, a joint venture of three Turkish companies. On the other hand, the construction stages of the project did not run smoothly all the time. In June 1988, there were reports in the Turkish press of workers being laid-off because some contractors did not have the money to pay them. This was caused by the government's tight anti-inflationary monetary policy. There were also reports of bad construction and serious leaks in the tunnels system connected to the dams. Meanwhile, SPO and the GAP office are trying to stimulate the interest of foreign agro-industrial investors by convening various conferences and seminars aimed at the agricultural and industrial development that should take place in the second half of the 1990s. In addition, studies are

Table 6.19 : Estimated Production and Value-added in Agriculture

	1985		2005	
	Production ¹	Value-added ²	Production ¹	Value-added ²
Crop Cultivation				
Wheat	1,749	63.5	3,270	151
Barley	1,104	32	1,625	52
Drybeans	2	2	53	45
Lentils	465	231	705	309
Cotton	161	46	478	193
Sesame	18	20	70	89
Tomatoes	193	55	1,024	260
Potatoes	5	1	325	39
Other vegetables	1,092	119	1,181	226
Maize	8	1	150	12
Rice	6	5	96	51
Feed grains	6	2	265	22
Soybeans	-	0.1	158	32
Groundnut	-	0	85	59
Sunflower	6	1	91	24
Pistachios	33	122	125	-
Grapes	699	290	787	875
Others	-	78.5	-	-
Subtotal	5,552	1,069	10,488	2,439
Livestock				
Milk	395	-	1,254	-
Meat	76	-	162	-
Subtotal	466	-	1,416	-
Fishery and Forestry	-	33	-	100
Total	6,018	1,102	11,904	2,539

(-) Rounded figures.

(1) Thousand tons.

(2) TL billion in 1988 prices.

Source: The General Directorate of Press and Information.

being prepared in land utilisation, the marketing of products, and the training of Turkish farmers (COMET, 1989).

On the whole, it is expected that GAP will boost the Turkish economy in general and meet the anticipated rise in domestic demand in the future, as well as increase exports and reduce imports. This should narrow the trade deficit gap and perhaps even create a surplus which will contribute to Turkey's economic development and strengthen its balance of payments and its political status both regionally and internationally. Observers in Ankara tend to be either enthusiasts who are convinced that this is the greatest project Turkey has ever accomplished, or pessimists. The latter point out that no realistic environmental impact studies have been done; that Syria opposes the project because it adversely affects its water supply from the Euphrates and can therefore prevent any foreign aid from being allocated, and that the project has attained importance in Turkey that makes objective analysis impossible (British Agricultural Export Council, 1986).

6.16 Conclusion

The chapter has described the structure of Turkish agriculture and the changes that occurred after 1980. It is difficult to say whether the structural adjustment programme had an absolute advantage or disadvantage. The distortions that existed before 1980 were eliminated substantially but not completely. Prices are still not completely determined by the market, although they are more rational now. Other distortions include: over-mechanisation in mainly small land holdings, and low interest rates on agricultural credits.

The 1980 economic reforms improved the agricultural sector performance in

several respects. The devaluation of the Turkish lira increased the incentive to export; reductions in consumption subsidies led to more rational pricing of food-stuffs, and increases in the prices of fertilisers encouraged their more efficient use. However, the reforms had their negative side, the liberalisation of trade increased agricultural imports by a much higher rate than the rate of increase of agricultural exports. Imports rose from US\$ 36 million in 1979 to US\$ 808 million in 1991 compared to a rise in exports from US\$ 1,344 million in 1979 to US\$ 2,683 million in 1991 (see table 6.8). But, the agricultural trade surplus that Turkey enjoyed before 1980 remained during the decade of the 1980s. Hence, it may be recommended that Turkey keeps its import protection measures on agricultural products and continues its export drive and the path of economic reforms to maximise the benefit from its resources. At the same time, Turkey needs to take measures aimed at improving agricultural research, extension and veterinary services, infrastructure, marketing information, and promotion systems including packaging.

Trade liberalisation increased agricultural imports of goods that are not grown in Turkey. On the other hand, liberalisation has reduced the size of the black market in livestock, which had a positive impact on the Turkish economy as a whole. This may be considered one of the advantages of structural adjustment in Turkey. As regards the EC common agricultural policy, this was found to have negatively affected some of Turkey's agricultural exports to the Community such as citrus fruits but, its traditional exports of hazelnuts and dried fruits were not affected.

On the whole, Turkey has a big agricultural potential which should not be underestimated. Agriculture can contribute to the economy quite substantially

and with its development other sectors will be positively affected, mainly industry. It appears that the Turkish government realised this fact and thus embarked on the GAP project which may contribute substantially to its economic development by the beginning of the next century.

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Chapter VII

The Turkish Tourism Sector in the 1980s

7.1 Introduction

The tourism industry was one of the sectors that was positively affected by the 1980 economic reform. With its outward-oriented policies aimed at increasing its foreign exchange receipts, tourism was an important source of hard currency that could support Turkey's balance of payments. In addition, tourism was expected to increase employment opportunities, income, and tax revenues and reduce the current account deficit and foreign debts.

Before 1980, tourism was relatively less important in the government's economic development plans. Sectors such as industry and agriculture had higher priority and consequently received more investment funds. However, with the liberalisation programme in the 1980s and the orientation towards foreign exchange generating industries, more financial resources were allocated to the tourism sector for the development of its infrastructure and superstructure. Another factor that accelerated the pace of growth in the sector was the more liberal foreign investment policies which were introduced by the Turkish government and led almost to a doubling of the foreign capital inflow between 1982 and 1986.

Other factors contributing to the growth in the sector include the devaluation in the Turkish lira, which made the country cheaper to stay in compared to other tourist resorts, and the increasing political stability after 1980 which encouraged

both tourists and foreign investors at the same time. However, as in any other country, tourism is very sensitive to political developments whether internal or external. Internally, the increasing democratisation of Turkey and its improving record of human rights help improve the image of the country and thus increase the number of tourists. On the other hand, security problems in the south east or political upheavels in the country which may lead to a military coup could reduce the number of visitors going to Turkey. Externally, two developments had a clear impact on Turkish tourism. On the one hand, the political and economic changes in eastern European states increased the flow of citizens from those countries into Turkey who go mainly on shopping expeditions. On the other hand, the 1990-91 Gulf crisis left a negative impact on Turkish tourism both in the form of revenues and number of tourists. The impact of the external factor will be assessed later in the chapter.

The impact of the changes occurring in the tourism sector whether in legislation or economic planning led to a fourfold increase in the number of tourists visiting Turkey between 1979 and 1989. However, although the development of the sector has had its economic benefits, tourism in general has social and physical (environmental) costs, which are difficult to measure, and may outweigh the benefits.

This chapter will analyse Turkey's potential for tourism, domestic and foreign investments in the sector, the current trends in Turkish tourism, and the economic impact (costs and revenues) of the industry. Finally, a conclusion with recommendations for the development of the sector will be considered.

7.2 Turkey's Tourism Potential

Turkey has untapped resources for tourism. It combines tourism assets, that would satisfy most tourists, at competitive prices. Turkey is the geographical bridge between Asia and Europe which makes it easily accessible from both continents, thus the crossroad of many civilisations. Part of the country is in Europe and called "Thrace", while the remaining larger part of the country is in Asia and called "Anatolia" or "Asia Minor". The sea of Marmara, the Bosphorus, and the Dardanelles separate Europe from Asia. Its strategic geographic position makes it easy to enter by any means of transport (air, sea, land).

Turkey is endowed with an attractive physical environment with the Taurus Range parallel to the Mediterranean sea in the south and the Pontic mountains along the coast of the Black sea in the north. In addition, Turkey has numerous other mountain peaks in the east which in summer months experience the sub-tropical climate of the Mediterranean. The southern Anatolian coast has the warmest climate in Turkey and is referred to as the "Turkish Riviera". The excellent climate with outstanding sightseeing and varied scenery is combined with extensive and diverse antiquities of the Hittite, Greek, Roman, Byzantine, and Ottoman civilisations. Moreover, Turkey has beach resorts that stretch along 7,000 km of coastline, and particularly along the Aegean and Mediterranean coasts where the climate permits a seven-month season. It is also in this area where many of the antiquities are located. Moreover, it is worth mentioning that the Turkish authorities realise these advantages and subsequently concentrate most of their projects on the southern coast (Turkish Riviera).

From the above review of Turkey's tourism assets, it is clear that the country

has the potential for many kinds of tourism, whether “wanderlust” or “sunlust” (terms used by Lea, J., 1988). Moreover, Turkey does not only have tourism potential for the summer holiday but for winter too, as its high mountains have skiing resorts such as Uludag in Bursa which would guarantee the flow of foreign exchange for the country during the off season and thus alleviate the fluctuation in tourism earnings from one season to the other.

The potential for tourism in Turkey requires much capital and planning to be fully exploited and with a sector that does not require relatively high labour skills, the authorities should stress the importance of development in this sector in their economic plans.

7.3 Investment in the Tourism Sector

There are several institutions in Turkey that are involved in the promotion of tourism, the training of labour, and the granting of loans and credits to investors during the initial investment and operational stages. These are: The Promotion Foundation of Turkey (TUTAV), the Tourism Development and Training Foundation (TUGEV), and the Tourism Bank (Turizm Bankasi) which has the major role in most investments in the tourism sector (OECD, 1987).

The government’s role in the development of tourism is mainly confined to infrastructural investments in areas of high potential. The actual physical development of the area is left to the private investors, both domestic and foreign, who may benefit from a package of incentives offered by the government. In what follows, there will be a brief review of these incentives in addition to a study of domestic and foreign investments in the Turkish tourism sector.

7.3.1 Investment Incentives in Tourism

The Turkish government does not differentiate between domestic and foreign investors in the terms and conditions of its tourism investment certificate. This means that foreign investors enjoy the same incentives granted to Turkish entrepreneurs with the same rights and obligations.

In order to be eligible to receive an encouragement certificate i.e., benefit from the incentives, the project's total fixed capital must be worth TL 250 million or more in priority development regions (located mostly in central and eastern Turkey) and over TL 5 billion elsewhere. The latter consists of two classes of regions: "normal", which are in central and western Turkey, and "developed", which include the areas in and around major cities such as Istanbul, Ankara, Izmir, Kocaeli, and Bursa (Alacaklioglu, A. S., 1990).

In addition to the condition on capital value, other conditions related to the nature of the tourist facility exist. These include: accommodation facilities (minimum 100 bed capacity), restaurants (minimum chain of three with minimum 30 persons capacity each), yachting establishments with minimum 45 bed capacity fleet, and expansion or modernisation investments related to the existing facilities.

After meeting the above mentioned conditions, the investor is eligible for the following incentives:

- Allocation of state owned lands in tourist areas where infrastructure is provided. Normally, the land is rented to the private investor on a long-term basis.
- Long-term low interest loans from the Tourism Bank or the Tourism Develop-

ment Fund.

- Reduced rates for electricity, water, and gas.
- Licence to employ foreign personnel up to 20 of total personnel.
- Property tax exemption for 5 years amounting to 0.4 of the value of fixed property.
- Customs tax exemption of raw material and intermediate goods.
- Postponement of value-added tax.
- Cash grant made to investors which is equal to a certain percentage of the project's equity finance.

Other incentives are also included in the government's package such as the free transfer of profits and capital to the country of origin.

7.3.2 Domestic and Foreign Investments in Tourism

The Tourism Bank in Turkey is the major financial institution involved in the tourism industry. Its role is mainly to provide credits to investors in the sector, these credits increased substantially between 1981 and 1990 thus reflecting the success of the government incentives and the growth in the tourism sector. Table 7.1 shows that credits granted by different banks for investment in the tourism sector increased from about TL 2 billion in 1981 to TL 2,000 billion in 1990, which is an impressive growth even in real terms.

Table 7.1: Credits to the Tourism Sector
(TL billion)

	Credit		Credits
1981	2.1	1986	61.8
1982	7.5	1987	206.4
1983	13.7	1988	764
1984	24	1989	1,244
1985	34.5	1990	1,999

Source: State Institute of
Statistics.

The multiplier effect, of the increase in tourism credits, on other sectors in the economy would be of great interest for this study, but unfortunately it is impossible to be precise in this respect given the data limitation. It is believed that the sector that benefited most from the increase in tourism investments is the construction sector with a positive effect on employment caused by the growth occurring in both sectors.

Turkey's tourism potential combined with the investment incentives offered and the liberalisation of the economy attracted foreign investors with their hard currency that the country desperately needs. The tourism sector ranked first among other economic sectors in terms of foreign capital invested until 1990 with the United Kingdom the largest foreign investor (ICOC, 1990). The total amount of foreign capital invested in tourism reached about TL 419 billion i.e., about US\$ 163 million. In addition to the foreign exchange flow into Turkey, these investments have a positive impact on the flow of tourists into the country given the fact that those foreign investors have the experience to cater for what the tourists really

need.

Table 7.2 shows the increase in the number of foreign projects in Turkey since 1982. Those projects which increased by nearly fourfold by 1986 reflect the high profitability of those investments although the capital involved per project (foreign investment/project) declined over the period.

Table 7.2: Foreign Investment in Tourism
(US\$ million)

	Projects	F.Invest. ^a	T.F.Ivest. ^b	% share ^c
1982	7	19.9	167	11.92
1983	9	1.8	103	1.75
1984	13	2.9	271	1.07
1985	16	14.9	234	6.37
1986	26	37.1	232	15.99

(a) Foreign investment.

(b) Total foreign investment.

(c) Percentage share of tourism in total foreign investment.

Source: Istanbul Chamber of Commerce.

The decreasing capital per project reflects the diversity of the tourist industry in Turkey and the large number of resorts compared to the number of tourists. This has meant that entrepreneurs have invested in smaller projects. This has decreased costs and maximised the number of facilities so as to cater for as many tourists as possible; therefore, increasing the returns on investment.

7.4 Foreign Tour Operators and the Turkish Travel Trade Sector

With the growth of the tourism sector in Turkey and the increase in organised

international travel, the Turkish travel trade sector developed substantially and began to play an important role in the tourism industry. The Turkish local tour operators developed from their traditional "travel agency" role into handling incoming tourists and providing all kinds of ground arrangements, operating outgoing tour packages for Turkish tourists, and dealing with domestic travel arrangements. Istanbul is the centre of Turkish travel trade with the largest number of tourist arrivals and tour operators.

The Turkish travel trade sector faces competition from international tour operators who arrange tourism packages and offer it to their customers abroad. Since the bulk of arrivals are handled by those international operators, the local operators in Turkey have less power over the inputs of their tour packages and; hence, compete in the markets abroad through the price of their product rather than its quality.

Due to the increasing competition among tour operators, Turkish operators are diversifying their activities and merging with other fields of tour operations. This strategy will ensure their continuity in the market in the long-run, increase their profits, improve the quality of their service, decrease costs, and improve their ability to compete against foreign tour operators. The diversification of activities include: hotel management and investment, vacation village investments, restaurants, transport, and marina operation.

Some Turkish observers (Manisali, E. and Yarcan, S., 1987) believe that the existence of foreign tour operators is beneficial in the short-run in order to attract foreign tourists. However, in the long-run, the Turkish foreign tourist market should be dominated by Turkish operators through their integrated operations

approach and the increase in the number of local operators in the industry.

Many foreign tour operators (mainly from Germany) arrange management contracts with the owners of a hotel or a vacation village. In this contract, the owner of the establishment leases his asset to the tour operator in return for a certain percentage of the profits (about 10%) made by the operator in addition to a "basic fee" which amounts to 5% of the turnover. The reason for such an arrangement is the higher profitability for the foreign operators and their preference to manage their accommodation facilities themselves. This arrangement enables them to have a good standard of service, design, and layout without engaging in any risks or extra costs related to having a fixed asset in Turkey all year round.

7.5 Trend in the Tourism Sector

The general trend of the tourism sector in Turkey has been going upward since the liberalisation measures in 1980. The growth in the tourism revenues, number of arrivals, and accommodation capacity was mainly due to the devaluation in the Turkish lira which made the country cheaper and increasingly competitive in comparison to other countries on the Mediterranean. Moreover, the liberalisation policies whether in trade or the movement of capital encouraged foreign entrepreneurs to invest in the profitable tourism sector. Finally, probably an important factor leading to the growth in the tourism sector is the political stability of Turkey since 1980.

This section will examine the changes that occurred in the tourism sector with respect to indicators such as the number of tourists arriving in the country, the country of origin of tourists, accommodation capacity, occupancy rates in hotels,

and the average expenditure and nights spent by each tourist.

7.5.1 Tourist Arrivals in Turkey

The increasing public investments in infrastructure is one of the main factors that encouraged many tourists to visit Turkey, as there are few travel problems. Table 7.3 shows that the number of foreigners arriving at Turkish frontiers increased about fivefold within eleven years (1979-1990). Moreover, the two main means of transport used by the tourists are the plane and car, those two means were used by about half those visiting Turkey in 1979.

Table 7.3: Foreigners Arriving by Means of Transport

	1979	1985	1986	1987	1988	1989	1990
Vessel	480,052	548,756	445,922	575,456	725,502	764,237	756,534
Train	63,109	49,528	53,857	65,086	68,490	77,155	144,753
Plane	355,289	863,153	966,424	1,419,413	2,142,975	2,347,283	2,563,516
Car	206,656	728,780	931,079	846,101	1,328,230	1,327,402	1,928,032
Total	1,105,106	2,190,217	2,397,282	2,906,065	4,265,197	4,516,077	5,392,835

Source: State Institute of Statistics.

However, by 1990, the number of foreigners arriving in Turkey using plane or car increased to about 80% of the total number of tourists arriving with a relative decline in arrivals by ship. This fact reflects the increasing capacity and efficiency of Turkish infrastructure; especially airports and roads. Therefore, there is a need to invest more in these two means of transport by expanding the road network and the number of local airports which would facilitate the movement of a larger number of tourists from, into, and within Turkey. In fact the Turkish government

has been recently investing in building new airports and roads to keep the country's infrastructure less congested with the increasing number of tourists. In addition, increasing the number of charter flights and tour packages may further increase the number of tourists. It is believed that direct charter flights from Europe to Turkish provincial airports leads to the increasing growth in tourist arrivals by plane. Those arriving by cars come mainly from neighbouring eastern European countries with shopping purchases loaded into the cars.

7.5.2 Country of Origin of Tourists

It is clear from table 7.4 that the bulk of tourists visiting Turkey until 1989 came from western Europe and Asia. Those two regions represented about 73% of the total number of tourists, western Europe alone represented about 60%. Within Europe, German tourists were about one third of total European visitors. The United Kingdom was the second most important "exporter" of tourists to Turkey, together with Germany they represent about half the European tourists. Greece was ranked third; most Greeks go mainly to Istanbul. However, with the political developments in eastern Europe, and the resulting deterioration in the economic situation of that region, tourists from eastern European countries increased substantially. The total number of tourists going to Turkey reached about 5.3 million in 1990 of which 971,000 were Germans, 326,000 Romanians (13,000 only in 1989), and 311,000 Yugoslavs. Moreover, visitors from Bulgaria, Czechoslovakia, and the USSR increased in number by 300-400%. Most eastern European visitors come as shoppers rather than holiday makers (Turkey Confidential, 1991). In 1991, the number of tourists declined by about 17.7% (lower than expected) to about 4.7 million due to the Gulf crisis. About half the tourists came from eastern Europe

Table 7.4: Arrivals of Foreign Travellers at Frontiers

Country	1988	% Share	1989	% Share	% Change ^a
France	246,784	5.9	283,545	6.4	14.9
Germany	767,905	18.4	896,989	20.1	16.8
Greece	430,331	10.3	277,333	6.2	- 35.6
Italy	144,322	3.5	154,083	3.5	6.8
Spain	44,283	1.1	56,176	1.3	26.9
Switzerland	67,662	1.6	77,945	1.7	15.2
U.K.	465,142	11.1	405,943	9.1	- 12.7
Other countries	405,649	9.6	537,816	12.1	32.6
Total Europe	2,572,078	61.6	2,689,830	60.3	4.6
Canada	29,220	0.7	31,587	0.7	8.1
U.S.A	165,401	4.0	204,502	4.6	23.6
Total N. America	194,621	4.7	236,089	5.3	21.3
Australia & Japan	66,652	1.6	75,510	1.7	13.3
Yugoslavia	290,498	7.0	217,266	4.9	- 25.2
Other E. Europe	285,426	6.8	481,178	10.8	68.6
Latin America	21,471	0.5	27,158	0.6	26.5
Asia	536,171	12.8	591,049	13.3	10.2
of which					
Iran	233,838	5.6	240,972	5.4	3.1
Saudi Arabia	32,708	0.8	27,338	0.6	- 16.4
Africa	202,008	4.8	133,912	3.0	- 33.7
of which					
Algeria	36,027	0.9	17,575	0.4	- 51.2
Egypt	15,729	0.4	15,452	0.3	- 1.8
Morocco	4,472	0.1	6,074	0.1	35.8
Others ^b	3,802	0.1	7,159	0.2	88.3
Total	4,172,727	100	4,459,151	100	6.9

(a) Percentage change between 1988 and 1989.

(b) Includes other North America and stateless persons.

Source: OECD, 1990.

which partly compensated the decline in visitors from other parts of the world mainly western Europe (Turkey Confidential, 1992).

Among Middle Eastern countries, Iran has the highest share of tourists. The number of Iranian tourists reached about 240 thousand in 1989 representing 5.4% of the total number of tourists visiting Turkey and more than one third of Middle Eastern tourists.

In general, the growth in the number of foreigners visiting Turkey between 1988 and 1989 reached 6.9%. However, in 1990, the growth in visitors reached about 25% but declined in 1991 by 17.7% due to the Gulf crisis (Turkey Confidential, 1992). These figures are a positive sign concerning the Turkish tourism industry; especially when compared with the growth figures of other traditional Mediterranean countries such as Greece (3.9%), Italy (- 1.0%), Spain(-0.2%), and France (3.6%).

On the whole, the Turkish authorities should be aware of their competitive edge and maintain their competitiveness in terms of the flight fares, tourist packages, accommodation prices, and, of course, the quality of service in order to increase their share of international tourism.

7.5.3 Accommodation Capacity

Table 7.5 shows that there is a considerable growth in accommodation capacity to be expected in the next decade. The number of facilities is expected to more than double if we assume that the projects planned and under construction will be ready within ten years. The number of beds is expected to be triple the existing

Table 7.5: Tourist Accommodation in Turkey (as of 31/12/89)

	Planned			Under Construction			Operating		
	A	B	C	A	B	C	A	B	C
Hotels									
5. Star	36	11,108	23,377	23	7,367	15,694	28	7,615	15,473
4. Star	82	15,045	27,323	33	6,454	13,330	49	8,092	16,533
3. Star	315	30,321	62,449	148	12,388	25,304	154	12,262	24,744
2. Star	274	12,262	25,043	199	9,297	18,627	316	16,112	30,996
1. Star	43	1,418	2,834	76	2,666	5,010	256	9,426	18,040
Motels									
1st Class	6	146	295	14	734	1,466	16	912	1,832
2nd Class	28	690	1,364	31	784	1,522	31	658	1,320
Holiday Villages									
1st Class	51	14,418	30,964	14	3,867	8,215	27	8,421	17,907
2nd Class	15	3,780	7,608	3	865	1,856	6	533	1,225
Guest Houses	160	2,741	5,348	77	1,598	3,138	139	2,205	4,364
Camp Sites	15	1,104	3,204	6	780	2,205	27	2,453	2,745
Inns	1	56	150	-	-	-	13	712	2,369
Hot Springs	-	-	-	-	-	-	1	20	40
Apart Hotels	-	-	-	-	4	7	3	141	496
Special	3	1,258	1,858	9	346	705	30	1,041	2,002
Total	1,029	92,347	191,817	633	47,150	97,079	1,102	70,603	146,086

A is number of facilities.

B is number of rooms.

C is number beds.

Source: Ministry of Tourism.

capacity by the time the projects are finished.

The bulk of Turkish tourist accommodation capacity exists in hotels and holiday villages. However, the fact that more than half the hotels' capacity (55,740 beds out of 105,786 beds) is in 2 star and 3 star hotels shows that most of those visiting Turkey prefer to pay as little as possible on accommodation. However, given the high spending propensity of tourists in Turkey (see table 7.8) one can say that those tourists spend less on accommodation and more on commodities such as food, transport, ...etc.

The growth in the accommodation capacity in the tourism sector has beneficial backward and forward linkages for the Turkish economy. The limited amount of data restricts any detailed study of the impact of such growth, but one can say that the activities in the accommodation subsector of tourism have positive backward linkages with the construction sector; thus leading to its growth with all the multiplier effect that this might have on employment, banking, increasing experience, consumption, and GNP growth. On the other hand, some negative side effects might occur in terms of higher inflation, and increasing pressure on the exchange rate. The latter effect depends on the elasticity to import of the construction sector. The forward linkages are expected to occur mainly in terms of higher employment and the rise in foreign exchange revenues. These linkages may have their inflationary pressures on the economy with a positive impact on the exchange rate.

7.5.4 Occupancy Rates in Turkish Tourist Accommodation

Turkey seems to be behind other European tourist resorts with respect to the

occupancy rates of its tourist accommodation facilities (table 7.6). Countries like the United Kingdom, Spain, and Portugal have higher annual average occupancy rates. However, Turkey's accommodation sector is more busy over the whole year if compared to countries like Germany, Italy, and Switzerland.

Although the occupancy rates for Turkey in the peak month (August) is relatively high (66.4%), other countries like Italy, Spain, and Portugal have a higher rate (more than 70%). This raises questions about under-use of capacity and inefficiency in the Turkish accommodation sector. Manisali, E. and Yarcan, S., (1987) showed in their survey that the occupancy rates in foreign-managed hotels in Turkey is 83.3%, while it was 67.5% in locally-managed hotels. Assuming that most foreign managed hotels have direct arrangements with foreign tour operators, it is still the responsibility of the management in Turkish hotels to be more efficient and competitive if they want to stay in the business. They should have their arrangements with foreign tour operators and offer better quality service and lower prices. The latter policy could easily be implemented if there was an incentive package from the government which would increase the occupancy rates and solve the problem of unutilised capacity. Turkey has more than 30% of its tourist accommodation capacity unutilised during the peak season. This unutilised capacity goes as low as 76.3% in January, the lowest rate among all countries under study in the table.

Table 7.6: Monthly Hotel Occupancy Rates of Beds in 1989 (%)

	Germany	Italy*	Portugal*	Spain	Switzerland*	Turkey	U.K.
January	27.0	24.2	34.3	43.0	27.3	23.7	26.0
February	33.0	31.3	41.3	48.5	39.7	27.9	33.0
March	34.9	32.1	49.7	53.5	39.3	34.0	40.0
April	34.5	35.9	54.0	48.2	30.0	39.2	40.0
May	43.4	32.7	57.5	52.7	25.6	56.0	45.0
June	46.0	42.8	56.8	53.6	34.5	54.0	53.0
July	53.5	60.5	64.3	62.8	45.8	58.7	56.0
August	54.0	71.0	76.9	74.8	49.1	66.4	60.0
September	51.8	47.2	65.1	60.7	43.9	61.7	59.0
October	44.2	35.6	56.2	51.8	30.3	51.3	51.0
November	30.3	22.8	40.5	44.1	16.7	32.5	40.0
December	27.2	26.2	34.0	38.4	20.4	28.5	36.0
Annual Average	40.0	38.5	52.5	52.7	33.5	44.5	44.9

(*) Rates for 1988.

Source: OECD, 1990.

The fluctuation in occupancy rates is directly related to the seasonality of tourism which creates dilemmas for both policy-makers and investors at the same time. It is difficult to say whether Turkey should invest more in accommodation when this extra capacity will be used for a limited number of months only. The issue of seasonality will be discussed later in the chapter.

7.6 The Economic Impact of Tourism

7.6.1 Nights Spent in Tourist Accommodation and Tourist Expenditure

Table 7.7 shows that the average length of stay for tourists in Turkey is less than the average stay of tourists in the countries under study.

Table 7.7: Average Nights Spent in Tourist Accommodation.

	1987	1988	1989
Austria	5.4	5.3	5.2
Germany	2.3	2.3	2.3
Italy	4.6	4.5	-
Netherlands	2.1	2.6	2.8
Portugal	4.5	4.5	4.4
Spain	6.5	6.5	5.9
Switzerland	3.7	3.7	3.6
Turkey	3.1	3.4	3.1
Yugoslavia	5.9	5.8	5.7
Average	4.2	4.3	4.125

Source: OECD, 1990.

Although the average stay in Turkey is higher than the average for countries like Germany and Portugal, the average nights spent in Turkey is low if compared to other countries on the Mediterranean such as Italy (6.3 nights), Spain (4.5 nights), and Yugoslavia (5.7 nights).

On the other hand, the big inflow of tourists to Spain, Italy, and Switzerland

(table 7.9) and the higher average of nights spent there in comparison to Turkey was not reflected in higher receipts per tourist (table 7.8). On the contrary, the average receipt per tourist in Turkey reached US\$ 573 in 1989 compared to figures of US\$ 301 for Spain, US\$ 217 for Italy, and US\$ 556 for Switzerland. The high receipt per tourist in Turkey could be attributed to the large numbers of "tourists" from Eastern Europe who visit the country on shopping expeditions. Some Eastern European "tourists" go to Turkey with goods which they sell in informal markets in Istanbul and buy other items such as clothing which are in short supply at home, others come with their hard currency. This sort of business tourism or "suitcase trade" increases the revenues from tourism with a minor pressure on tourism sites (Economist Intelligence Unit, 1992) thus rendering the comparison with other countries that have a large tourism sector, such as Spain, somewhat inaccurate.

Overall, Turkey's receipts per tourist are the highest among the main European countries with the exception of the United Kingdom and Germany. In 1990, Turkey's net revenues (receipts minus expenditure) from tourism increased to US\$ 2,705 million but declined in 1991 to US\$ 2,062 million. Receipt per tourist declined in 1990 and 1991 to US\$ 562 and US\$ 553 respectively. The decline in receipts in 1991 was mainly due to the Gulf crisis.

The relatively smaller number of nights spent by tourists in Turkey and the fact that the receipts per tourist are among the highest in Europe may again be attributed to the large number of visitors who go to Turkey on shopping expeditions. Moreover, the low expenditure of Turkish tourists abroad (US\$ 565 million in 1989) allows Turkey to retain most of the foreign exchange earnings (which

reached almost US\$ 2 billion in 1989) from this industry.

Table 7.8: Tourist Receipts and Expenditure (US\$ million)

	Receipts		Expenditure		Balance ^a		Receipt/Tourist ^b	
	1988	1989	1988	1989	1988	1989	1988	1989
France	13,784	16,500	9,713	10,292	4,071	6,208	360	-
Germany	8,478	8,658	24,945	24,129	- 16,467	- 15,471	646	590.9
Greece	2,393	1,998	738	818	1,655	1,180	308	247
Italy	12,398	11,987	6,053	6,773	6,345	5,214	223	217
Portugal	2,425	2,587	534	557	1,891	2,030	366	364
Spain	16,691	16,252	2,457	3,080	14,234	13,172	308	301
Switzerland	5,738	5,619	5,034	4,953	704	666	613	556
Turkey	2,355	2,556	358	565	1,997	1,991	564	573
U.K.	11,000	11,248	14,614	15,195	- 3,614	- 3,947	696	654
U.S.A	28,935	34,432	33,098	34,977	- 4,163	- 545	917	977

(a) Balance of receipts and expenditure (own calculation).

(b) Receipt per tourist = Receipts divided by total number of tourists (own calculation).

Source: OECD, 1990.

The success of Turkey in attracting a large number of tourists whether for holiday making or shopping is an important asset for Turkey in this industry. Hence, policy-makers should do whatever possible to preserve this asset which is an important source of desperately needed hard currency at a relatively "cheap" cost.

Table 7.9: Number of Tourists
in Some OECD Countries

	1988	1989
France	38,288,000	-
Germany	13,113,017	14,653,201
Greece	7,778,000	8,081,851
Italy	55,690,434	55,131,098
Portugal	6,623,867	7,115,900
Spain	54,178,147	54,057,562
Switzerland	9,352,900	10,103,400
Turkey	4,172,727	4,459,151
U.K.	15,795,200	17,203,900
U.S.A	31,556,890	35,249,046

Source OECD, 1990.

The below average nights spent by tourists in Turkey may have an adverse effect on the tourist accommodation sector and; hence, the development of the tourism sector in general. Low occupancy rates with a short length of stay may force some tourist accommodation facilities out of business, consequently threatening the smooth growth in the industry that occurred in the last decade. Therefore, in addition to the investment incentives offered by the Turkish government to investors in the sector, a package of incentives (mainly in the form of tax exemptions on income and profits) for accommodation facilities may be very helpful in improving those facilities. On the other hand, any form of subsidy or incentives package which may lead to more pressure on the government's budget will culminate in higher foreign exchange revenues. Finally, the package will not only

lead to support for those facilities facing financial difficulties, but it will increase their competitive edge through their ability to offer lower rates compared to other European accommodation sectors.

7.6.2 Employment in the Tourism Sector

Perhaps one of the most positive effects of tourism on the economy, apart from the increase in foreign exchange revenues, is the rise in employment. In a country like Turkey with a population growth of about 2.2%, any economic activity that would employ more people is welcomed, as long as it does not take them from other sectors. Employees working in the tourism sector are not required (in general) to be highly skilled, thus there are no major training costs or conditions apart from the ability to communicate.

The number of people employed in the Turkish tourism sector has been increasing but not proportionately with the increase in the number of tourists. The number of employees in tourism in 1987 was about 110 thousand (table 7.10) and increased to about 134 thousand in 1989 (about 20% rise). On the other hand, the tourists visiting Turkey increased from about 3 million in 1987 to about 4.7 million in 1991 (5.3 million in 1990) i.e., about 50% increase. Furthermore, if we divide the number of tourists (table 7.9) by the number of employees (see table 7.10, no data is available on the number of employees in tourism after 1989) we will have the following result: in Turkey there was one employee for every 32.4 tourists in 1988 and 33.3 tourists in 1989, in the United Kingdom there were one employee for every 29.6 tourists in 1988 and 30.9 tourists in 1989, while in Germany there was one employee for every 19.2 tourists in 1988. These results show that the Turkish

tourism sector lacks human resources in comparison to other European countries; especially Germany. This lack of personnel will be reflected in the quality of service and thus the future growth of the sector. However, two important points that may undermine that conclusion should be taken into consideration. First, the fact that most eastern European tourists, who represented about 50% of total tourists in Turkey in 1991, go on shopping expeditions means that those tourists do not cause any major pressure on tourism facilities and resources. Hence, to include them in the counting is an act of over-counting for “genuine” tourists who go to Turkey for their holidays only. Second, an increasing number of Turks take seaside holidays thus competing with foreign tourists for the same resources. However, there is no sign of a strain on those people working in the tourism sector (Economist Intelligence Unit, 1992-93).

Table 7.10: Staff Employed in Hotels and Restaurants

	1987	1988	1989
Germany	671,000	683,000	-
Turkey	110,336	128,796	134,034
U.K.	505,800	533,800	556,300

Source: OECD, 1990.

One of the problems facing the employers and the employees in tourism is seasonality. It is difficult to keep the employees all year round as this will result in extra costs at times of low revenues and low demand for tourist facilities. On the other hand, it will be difficult to find all the personnel needed to run a tourist facility at peak months if those were laid off earlier. Therefore, this presents a dilemma for employers who should be able to find the optimum solution as they

gain more experience and learn more about the market; especially in the holiday villages type of accommodation which is a relatively new innovation in tourism for Turkey (Manisali, E. and Yarcan, S., 1987).

7.6.3 The Share of Tourism Revenue in Exports, Trade Deficit, and GNP

Table 7.11 demonstrates the impressive increase in the role of tourism in the Turkish economy since 1980. Despite the growth in GNP and the drastic growth in exports during the last decade, tourism revenues were growing at an unprecedented pace; faster than exports in relative terms.

The share of tourism in GNP rose from 0.6% in 1980 to 3.3% in 1990 (2.3% in 1991 but this year was exceptional due to the Gulf crisis), while the share in exports rose from 11.23% in 1980 to 19.5% in 1991 despite the rise in exported goods by more than threefold. The rise in tourism revenues helped to almost close the gap between exports and imports. The revenues covered about 88% of the trade deficit in 1988 compared to a 6.53% in 1980. However, since 1989 the gap widened again due to the substantial increase in the trade deficit.

It is clear from the table that the major impact of the adjustment programme adopted in 1980, occurred starting from 1984 onwards when by that time confidence in the economy started to grow after three years of relatively low inflation (an average of about 33.3% annually) and the liberalisation policies started to bear fruit.

Table 7.11: Exports, Trade Deficit, GNP, and Tourism Revenues (US\$ million)

	Exports	TR ^a	% TR/Exp. ^b	Imports	TD ^c	% TR/TD ^d	GNP	% GNP ^e
1980	2,910	326.7	11.23	7,909.4	- 4,999	6.53	58,480	0.6
1981	4,702	381.3	8.11	8,933	- 4,230	9.01	59,502	0.6
1982	5,746	370.3	6.44	8,842	- 3,096	11.96	54,308	0.7
1983	5,727	411.1	7.18	9,235	- 3,507	11.72	51,570	0.8
1984	7,133	840	11.78	10,756	- 3,623	23.18	50,362	1.7
1985	7,958	1,482	18.62	11,343	- 3,385	43.78	53,612	2.8
1986	7,456	1,215	16.29	11,104	- 3,648	33.31	58,724	2.1
1987	10,190	1,721	16.89	14,163	- 3,973	43.32	64,428	2.7
1988	11,662	2,355	20.20	14,339	- 2,677	87.96	70,700	3.3
1989	11,627	2,557	22	15,753	- 4,126	62	73,800	3.46
1990	13,026	3,225	24.8	22,580	- 9,554	33.8	98,000	3.3
1991	13,598	2,654	19.5	21,038	- 7,440	35.7	113,000	2.3

(a) Tourism revenues.

(b) Percentage of tourism revenues to exports.

(c) Trade deficit.

(d) Percentage of tourism revenues to the trade deficit.

(e) Percentage share of tourism revenues in GNP.

Source: Istanbul Chamber of Commerce (ICOC), 1989.

7.7 The Impact of Changes in the Exchange Rate on Tourism Revenues

It may be said that the liberalisation of the exchange rate and the movement of capital were the main elements that positively affected Turkish tourism after 1980. The latter encouraged foreign investment which increased the flow of desperately needed foreign capital while the former rendered Turkey cheaper than many other Mediterranean resorts. To try measure the impact of changes in the exchange rate

(devaluation) on tourism revenues, a regression equation was formed. Table 7.12 shows that any devaluation in the Turkish lira positively affects tourism revenues in the following year.

Table 7.12: Impact of a Devaluation on Tourism Revenues

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(TR)	A	1.89	0.50
	ln(Exch ₋₁)	0.85	0.1

$R^2 = 0.95$, DW-statistic = 2.01

Chi-square for serial correlation = 0.12

Critical value = 3.84 at the 5% significance level.

n = 11 observations from 1981 to 1991.

TR = Tourism revenues.

Exch₋₁ = Exchange rate lagged by one period.

A = Intercept.

A one per cent depreciation in the TL leads to a 0.85 per cent increase in tourism revenues in the following year, which is a substantial improvement. Thus, one can conclude that structural adjustment measures drastically improved the performance of the tourism sector and increased the flow of foreign exchange which would support the Turkish balance of payments.

7.8 Tourism Revenues and Investment

Having tested the impact of the depreciation in the Turkish Lira on tourism revenues, it is interesting to see how the later affects investment in the sector. It is expected, according to the theory of internal investment, that profits or revenues of any economic activity are used to finance future investment in order to increase productivity and hence, future income. The sector in other words becomes self

sustaining. In the case of Turkey, with the increase in tourism revenues, the theory proved true with investment in the tourism industry being dependent on the income in that sector (see table 7.13 below).

Table 7.13: Tourism Revenues and Investment

Dependent Variable	Independent Variables	Coefficient	Standard Error
ln(RInv)	A	- 1.20	0.52
	ln(RTR ₋₁)	1.19	0.19

$R^2 = 0.91$, DW-statistic = 1.40

Chi-square for serial correlation = 0.011

Critical value = 3.84 at the 5% significance level.

n = 11 observations from 1981 to 1991.

RInv = Real investment in tourism.

RTR₋₁ = lagged real tourism revenues.

A = intercept.

Table 7.13 shows that any one per cent increase in real revenues in the tourism sector in the previous year positively affects real investment in the sector the following year by 1.19 per cent. The higher than unity relationship between revenues and investment may be due to the relatively young Turkish tourism industry which is in need of substantial amounts of capital to be invested in the sector for its development. This result may be a source of comfort for policy-makers in Turkey as investment in tourism would, accordingly, create less financial burden on their budget than if it would have been otherwise. It is expected that when the sector is sufficiently developed to meet the increase in the demand on its resources, the extra revenues generated will be diverted into other sectors.

7.9 Economic Costs of Tourism

Tourism, which has benefits such as the increase in income and employment, improvement in infrastructure, and the encouragement of entrepreneurial activities, has its economic costs. These costs (which are mainly theoretical) include: opportunity cost, increased inflation and higher land values, increased propensity to import, seasonality of revenues and the creation of other external, physical and social costs (Mathieson, A. and Wall, G., 1982). In what follows the above mentioned costs (which might not necessarily occur in Turkey) will be discussed in detail.

7.9.1 Opportunity Costs

It is difficult to measure opportunity costs in general. In tourism, the main factor of production is capital. In a country like Turkey where capital is scarce, the use of such a factor should be preceded by careful studies and cost-benefit analysis. Obviously, the huge increase in credits granted by the Tourism Bank (table 7.1) since 1980 could have been used to finance other productive projects which might generate the same amount of foreign exchange that tourism generated if those projects were to produce for the export market. Moreover, labour in the tourism sector is another factor of production that should be considered in the opportunity costs studies since labour could also be used in other economic sectors generating foreign exchange.

This analysis could not be carried further, given the difficulty of having any quantitative analysis. However, it is important that the Turkish government take into consideration such costs and not be carried away by the obvious direct benefits

of tourism.

7.9.2 Increased Inflation and Land Values

The increasing flow of tourists to Turkey in the last decade is expected to have exerted some inflationary pressures on the economy; especially that those tourists are of the high spending category. The fact that about 4.5 million tourists (about one tenth of the population) visited Turkey in 1989 should not be taken lightly in terms of their inflationary impact.

On the other hand, investors in the tourism sector are expected to have pushed prices further up. The increasing demand on land, labour, and construction inputs would all contribute to inflation in Turkey. However, the rise in land prices is expected to be minor as a result of the government's land allocation scheme (see tourism incentives).

Moreover, the expanding investments, with the resulting expansion in credits, which offered more jobs and incomes to those employed in the tourism sector would be another factor which would fuel inflation in Turkey.

7.9.3 Seasonality

Table 7.6 demonstrated the fluctuation in occupancy rates of tourist accommodation in Turkey. This fluctuation varied from a low of 23.7% in January 1989 to 66.4% in August which clearly reflects the fluctuation in the revenues not only for the owners of accommodation but to all those working in the tourism sector and its subsectors. Seasonality may be considered a major argument against a dependence on tourism. This phenomenon leads to seasonal unemployment, underemployment,

and the closure of many tourist facilities during the off-season.

7.9.4 Increased Propensity to Import

It is unknown to what extent the tourists visiting Turkey consume Turkish products. But, it is almost certain that many of them consume imported goods or products made from imported inputs. This fact increases the pressure on the Turkish lira and the trade balance which leads to a leakage of foreign exchange earned from tourism in order to purchase these imports.

7.9.5 External, Social, and Physical Costs

Tourism causes extra costs on the residents of the area being visited. These costs may include increased congestion and the provision of such services as garbage collection and disposal. This may lead to higher taxes in the long-run. On the other hand, tourism through its external economies may benefit the residents of the area visited through better infrastructure (roads, communication, sewerage, ...etc.), higher prices for their land and more job opportunities.

Physical or environmental damage to tourist attractions, in general, may occur due to over-use which may entail extra costs for maintenance. Recently, the Turkish government has shown some concern over ecological problems caused by massive construction activity in major tourism areas (Economist Intelligence Unit, 1992-93). Finally, social costs could be suffered by the residents of the visited area due to their contact with other foreign cultures that may threaten their own social standards and beliefs. This is more likely in the more conservative areas of Turkey, mainly the south east.

It is extremely difficult to measure these costs, either due to their intangible value (e.g., social and cultural costs) or being part of other variables such as inflation and the propensity to import. Meanwhile, the only reliable cost-benefit analysis of tourism would be the revenue-expenditure analysis and thus the net inflow of foreign currency into Turkey.

7.10 Conclusion

From what preceded, there is no doubt about Turkey's tourism potential and the success, so far, in exploiting this potential. However, there are certain aspects that should be considered by the Turkish authorities in order to, at least, maintain the growth in the sector at its current rate.

The fact that more tourists are expected to visit Turkey in the coming years requires more investment in tourist accommodation. But since the profitability of hotels in Turkey is modest, the existing investment incentives related to projects in accommodation facilities should remain. Foreign investors are, in general, reluctant to invest in hotels in developing countries since it locks in fixed capital with relatively long pay-back periods. Therefore, they prefer minority participation in new hotel enterprises as it enables them to obtain lucrative management contracts. These contracts may benefit Turkey in terms of expertise, but would keep the risk burden upon the shoulders of the Turkish investor. On the other hand, if foreign investors were obliged to participate, at least partially, in the actual physical investment, this would ensure the long-term continuity of foreign tourist flows in Turkey.

The competition from foreign tour operators who mainly dominate the "sun-

lust" market force local operators to work with decreasing profit margins. This leads to loss of income through the leakage of profits to foreign operators. Therefore, there is a need to integrate the marketing activities among local operators in the tourism field in order to reduce the leakages to outside the local tourism economy. On the other hand, Turkish tour operators should have branches abroad which would ensure the flow of foreign tourists in the long-run, reduce the dependence on foreign tour operators to bring in tourists, and increase the market share of local operators.

The increasing number of "sunlust" tourists requires the preparation of competitive tour packages by Turkish operators. This demands frequent and competitive air charters. Currently, there are a number of charter airlines operating from tourist generating countries to Turkey, but it would be a unique opportunity for Turkish airlines if they could benefit from this situation and get a larger share of the market by increasing their charter flights.

The success of the Turkish tourism sector is mainly due to investment and TL depreciation. Without those two factors it can be said that tourism in Turkey would not have achieved this remarkable growth in the 1980s. The depreciation in the Turkish lira proved to be responsible for most of the increase in tourism revenues which are an important source of capital for investors in the sector. Therefore, the improvement in the balance of payments could be mainly attributed to the devaluation in the lira occurring through out the 1980s.

Furthermore, there is a need to increase the budget of Turkish tourism bureaus overseas in order to enable them to have a better promotion policy, based on market research, that would help increase demand. Co-operation between Turkish tour

operators and the Turkish Tourism Board may help to achieve this objective.

Finally, expanding the existing infrastructure (mainly road network and airports, the two main means of transport for tourists) should continue as the number of tourists visiting Turkey is expected to increase.

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Chapter VIII

Conclusions and Findings

This research sheds some light on the effects of structural adjustment programmes in general, and in Turkey after 1980 in particular. A three sided study composed of the theoretical, macro-econometric, and sectoral sections was necessary to provide a comprehensive overall evaluation of the structural adjustment process in a developing country such as Turkey. Each of the previous chapters provides an analysis of one aspect of Turkey's post-1980 liberalisation experience. When examined together, they provide the relations and linkages necessary for any overall assessment of the policy implications of structural adjustment.

The next section covers the general research conclusions. Major research findings will be detailed in the third section while major policy implications will be considered in the fourth section. Finally, recommendations and points for future research will be outlined in the last two sections.

8.1 Summary of Conclusions

Although it was very difficult to investigate every theoretical aspect of structural adjustment programmes and their relevance to the Turkish experience, it was possible to come up with conclusions related to the general policies of liberalisation and their impact on the Turkish economy. Turkey's recent economic reforms included a package for the general liberalisation of the trade regime by reducing tariffs on imports, the promotion of exports (mainly manufactured products)

through a system of export incentives, nominal depreciation of the Turkish lira, restricting money supply expansion, liberalisation of interest rates, and a relaxation of foreign exchange restrictions and capital transfers. The main objectives of the adjustment programme were to achieve low rates of inflation, attract domestic and foreign investment, increase savings, and attain a favourable growth rate with a balanced budget and balance of payments.

While not all the objectives have been achieved and other problems loom on the horizon (foreign debts, sluggish investment), the general view with respect to the liberalisation experience is of cautious optimism for the future due to the limited success until now. The frequent devaluations of the period seemed to improve the trade deficit but at a cost of higher inflation.

Light industries such as textiles and agro-industries represent the largest single category of Turkish exports. These face tough competition from other semi-industrialised countries which raises the need for diversification in Turkish exports; hence, the need to increase fixed capital formation. It is clear that Turkey has been relying on continuous depreciation in the value of the Turkish lira and on an export incentives scheme (especially in the early 1980s) to keep its export drive (Arıcanlı, T. and Rodrik, D., 1990). However, these two policies are counterproductive in the long-run with an inflationary effect as a result of the first policy, and the financial strain placed on the budget and a possible retaliatory action from Turkey's main export markets (the OECD countries) if it continues its second policy. Both strategies reflect Turkey's reliance on the price competitiveness of its products rather than their quality, a strategy that might have serious drawbacks at home. Thus, there is a need to embark on an investment strategy involving both the public and

the private sectors to increase the industrial base of the country before most of the existing capacity, which was built in the 1970s, becomes obsolete. Moreover, this strategy would increase productivity and exports with a transformation in the structure of these goods if the investment plans were to take into consideration the diversification of these products. However, the economic instability in the country reflected by the continuing depreciations, inflation, and rises in interest rates, in addition to the crowding out of domestic capital by the government to finance its budget deficit, render the investment atmosphere gloomy; especially for foreign and domestic private investors. On the other hand, nominal devaluations in the lira, high interest rates, and export subsidies increase the financial burden on the budget; hence, limiting the government's ability to invest. The latter obviously increases the leakages from the treasury while the former two factors increase the burden of debt servicing.

Moreover, Baysan and Blitzer (Arıcanlı, T. and Rodrik, D., 1990) believed that one of the major contributors to the success of the Turkish exports drive after 1980 was its unutilised industrial capacity formed in the 1970s. In addition, the Iran-Iraq war helped boost Turkish exports at a time of sluggish international demand elsewhere due to the recession in the industrial countries in the early 1980s. However, with the export boom that Turkey witnessed after 1980, the unutilised capacity in the manufacturing sector was exploited by the mid 1980s. This fact reflects once again the need to expand the productive capacity of the country, otherwise a reversal of events may occur not long before the end of the century which might bring Turkey to a crisis similar to the one experienced in the late 1970s. If Turkey wants to be the "Japan of the Middle East", to use Ozal's

words, then it has to follow the example of the south east Asian countries and their export-led growth based on investment in productive projects which would feed more exports.

To summarise, there seem to be many problems ahead which need to be dealt with before it is too late since any delay would jeopardise the chances of finding solutions and increase the costs. The first and most important step is the need for a structural transformation in Turkish exports through increasing investments in export capacity and diversifying production to pre-empt any loss in exports in the future due to increasing competition from other traditional textiles exporters. Other problems of no less importance are increasing inflation, high interest rates (which will decline as inflation decreases), high public sector borrowing requirement, rising foreign debts, and continuing depreciation. The last two problems present a critical challenge to policy-makers in the coming years as the latter is difficult to stabilise without considerable foreign exchange reserves, while the former would require better tax collection and strict government spending with its drawbacks on economic growth. In the final analysis, an increase in exports in the future would increase Turkey's financial resources to stabilise the exchange rate, decrease the public deficit due to rising revenues from the exports activity, reduce inflation due to a stable exchange rate, and reduce interest rates as a result of the lower demand on financial resources from the government, due to decreasing public deficit, which would stimulate private investment. It is these unsolved problems that mean there must be some reservations which prevent considering the 1980 structural adjustment programme an outright economic success.

8.2 Major Research Findings

This study, which aimed at testing the validity of the theoretical concepts of structural adjustment programmes in Turkey came up with quite surprising results. The exchange rate, which is widely believed to have the major impact on the volume of exports and consequently the trade deficit, appeared to have played a moderate role. Furthermore, on the internal front, interest rates in Turkey had a minor role in the determination of deposits and credits.

The argument that a devaluation in the exchange rate will increase exports and decrease imports could not be proved in the case of Turkey. Although the above mentioned targets were achieved, the main factor was the rise in industrial production rather than the depreciation of the Turkish lira. However, the latter was found to have a weak relation with industrial output.

These results cast doubts as to the need for devaluation and its painful consequences represented mainly by inflation and the deterioration of real per capita income. But does that mean that Turkish trade would have been better under the pre-1980 economic system? And if so why should this be the case?

The overvaluation of the Turkish lira before 1980 encouraged capital outflows and increased imports to the extent where in 1977 Turkey started to have chronic shortages of foreign exchange. The econometric tests showed that the high negative elasticity of exports in case of a devaluation presumably led to an increase in the trade deficit in the 1970s. This impact can be justified mainly due to the inward-oriented policies which made Turkish exports limited and less competitive abroad. Meanwhile, any devaluation under the policies of the time (high import tariffs)

would result in higher prices for imported products, thus, increasing the demand for domestic goods leaving less products to export. This situation, with the need to import industrial inputs for domestic production, may be the cause behind the deterioration in the trade balance and the decline in the share of Turkish exports in world markets in the 1970s.

As to the post-1980 period, the above argument partially applies; because the period witnessed the liberalisation of trade, export-oriented policies and continuous depreciation in the Turkish lira. These factors, mainly export incentives, guaranteed the competitiveness of Turkish exporters (or those manufacturers who have the potential to export) abroad. Thus, the main determinant of the volume of exports became the capacity of industrial production to meet foreign demand rather than the value of the Turkish lira against other currencies.

With regard to the preceding points, one can say that the devalued exchange rate was not the direct incentive for investors to export their products. Exports depended on the availability of industrial capacity. The fact that Turkey aimed at increasing its industrial base before 1980, through its five-year development plans, prompted a rapid increase in Turkish exports which were stimulated by the export incentives offered by the government, depressed domestic demand, the availability of unutilised industrial capacity (the latter two factors existed mainly until the mid 1980s), and devaluation. Assuming that the industrial capacity did not exist, it would have been very difficult to see how Turkey would improve its trade balance at the time, a result that coincides with the findings of Krueger and Aktan (1992).

On the whole, the devaluation in the Turkish lira proved to have a weak effect on industrial production and a moderate impact on exports. The main impact on

Turkish trade was the change in the economic system as a whole, in particular export policies, which stimulated industrial output. These findings (related to the marginal impact of the exchange rate in increasing Turkish exports and the importance of export incentives) coincide with the findings of the questionnaire carried out by Milanovic (1986) where a sample of Turkish industrial exporters considered the export incentives package to be more important for them than the exchange rate in determining their export activity. However, it is worth mentioning that Milanovic's questionnaire is limited by the number of industrialists covered by the research, while this study is more broadly based.

In the literature of structural adjustment programmes, there are conflicting views as to whether the adjustment measures lead to an expansion or contraction in the economic activity in the short-run. In the case of Turkey, the country witnessed an average annual growth of about 5.9% in the decade of the 1970s with a negative growth (- 1.1%) in 1980. On the other hand, the GNP grew by more than 4% in 1981 and continued its growth throughout the decade of the 1980s, with an average annual growth of about 5.3% (OECD Economic Surveys, 1990/1991). Therefore, one can say that the direct effect of the programme (in the first year) was expansionary; but on the whole it had a small contractionary effect which should be ignored as minor given the high increase in nominal and real interest rates in Turkey since 1982.

As far as inflation is concerned, Fischer (Dornbusch, R. and Helmers, F., 1988) emphasises that a devaluation increases the domestic price level through the rise in the prices of imports. This view proved to be the case in Turkey. On the one hand, the devaluation in the exchange rate was found to exert an upward pres-

sure on prices which is another result that coincides with the findings of Krueger and Aktan (1992). On the other hand, Turkey witnessed a dramatic decline in the inflation rate after 1980 which remained relatively low (at an annual average of about 37%) until 1988 when it shot up to 75%. The developments could be explained on the basis that Turkey suffered from a chronic shortage of industrial inputs in the late 1970s due to the lack of hard currency. The lack of industrial inputs negatively affected output and led to a negative growth which resulted in a surplus of unutilised industrial capacity and high inflation as domestic demand could not be met by domestic output and imports were restricted. Meanwhile, the devaluation of the Turkish lira and the liberalisation of trade provided Turkish producers with the inputs and price competitiveness (mainly at home) they needed to resume their industrial production. Therefore, with supply rising and demand declining due to lower real income after devaluation, inflation went down; but only for few years before rising once again in 1988. The recent rise in inflation could be attributed to the continuous expansion in credits, rising real income as wages rose under pressure from the unions, and last but not least, the continuing decline in the value of the Turkish lira, and the "full" utilisation of industrial capacity (by Turkish standards the capacity is fully used given the less developed techniques used compared to those used in Europe).

With respect to the liberalisation of the interest rates, the theory proved to be inapplicable according to this study. Lending and deposit interest rates; especially the latter, had a minor effect on savings and credits. The results related to the relation between deposits and interest rates, in the last decade, coincide with the findings of Rittenberg (Nas, T. and Odekon, M., 1988) who concluded that while

negative interest rates discouraged savings in the 1970s, positive real interest rates in the 1980s had a much milder effect in terms of encouraging savings.

However, the propensity to save in Turkey decreased after 1980, in comparison with the 1970s, due to the decline in real wages. One reason for the slow response of savers (in real terms) after the liberalisation of interest rates could be the lack of confidence in the Turkish banking system after the 1982 banks' crash. On the other hand, the liberalisation of the foreign exchange controls helped increase the inflow of capital in remittances.

As to credits, lending interest rates were found to be completely irrelevant in the decision-making of Turkish investors in the 1980s. This is not surprising if we consider that, first the main borrower from the Turkish financial markets is the government to finance its budget deficit. The state borrowed regardless of what the market interest rate was. Second, despite the rise in interest rates in Turkey, the financial costs for Turkish manufacturers are still relatively low compared to their European counterparts in Spain, Portugal, Germany, and Italy (see chapter 5).

The increase in real wages; especially in the late 1980s, helped reduce the income distribution gap in Turkey. According to the 1987 income distribution survey, it was found that the Gini coefficient was reduced from 0.53 in 1983 to 0.43. Also, there was a redistribution of wealth from the highest quintile to the lowest quintile.

At the sectoral level, the study proved to be very useful in terms of determining the potential of each sector and its response to structural adjustment which has

shed some light on the measures needed in the future. An increase in the irrigated area and more market determined agricultural prices seem necessary to increase productivity and give better signals to farmers. In this respect, the GAP project seems promising with respect to the increase in the area of irrigated land. It could affect many other sectors (manufacturing, services, construction, banking, ...etc.) which could enhance Turkey's ability to export. An increase in the facilities to export slaughtered animals would improve Turkey's trade balance given the regional comparative advantage that Turkey has in that subsector. In addition, there is a big potential in the Turkish agro-industries which the authorities started to exploit recently. Another positive step that was taken recently is the liberalisation of the tobacco industry which would increase investment, thus, productivity leading to less imports and consequently a lower trade deficit. There is also a need for more liberalisation of agricultural prices, an increase in the quality and quantity of seeds produced in Turkey, and the need for land reform (given the small size of holdings) which would facilitate economies of scale. It may also be beneficial to allow foreign transport companies to operate in Turkey which would increase competition and the availability of vehicles to transport agricultural produce to foreign markets. The EC common agricultural policy (CAP) was found to have a minor impact on Turkish agricultural exports although it negatively affected the share of Turkish trade with the Community. Moreover, the liberalisation of trade reduced the size of the black market in trade including livestock. Overall, it may be said that agriculture in Turkey improved after 1980.

In manufacturing, there is a need to update existing machinery; especially in the textiles sector in order to preserve Turkish competitiveness in the world market.

Moreover, an increase in capacity utilisation and incentives for machinery and transport equipment producers seems necessary to increase their competitiveness. This would help diversify Turkish exports and reduce the dependence on imports of those goods. In addition, Turkish industry lacks investment in R&D and its labour needs to be more skilled; especially in some small firms. On the other hand, the privatisation of the public corporations should continue at a faster pace in order to increase efficiency and capacity utilisation, which would increase productivity, mainly in the cotton weaving, cotton spinning, fabric processing, and knitting subsectors. Turkey faces problems in its major textiles export markets represented by EC quotas on Turkish products and tough competition mainly from south east Asian producers. Thus, the irony is that at the time when Turkey is asked to open its markets for foreign exporters, its own products are facing trade barriers in their export markets. However, Turkey may overcome this obstacle by 1996 when the customs union with the EC is established. Meanwhile, Turkey may benefit by adopting a lower-cost higher-quality strategy which would maximise its returns from textiles exports despite the quotas imposed. It can be said that the manufacturing sector in Turkey had the major benefit from liberalisation which allowed it to increase its share in exports compared to agriculture. Finally, with the existing policies and adopting the above suggestions, Turkey can make the most of its structural adjustment programme.

The tourism sector was considered of increasing importance for the Turkish economy given the continuous rise in revenues from this sector. The devaluation in the Turkish lira after 1980 may be the major economic policy that had a substantial effect on revenues from this sector as the country became relatively

cheaper for foreigners. The revenues proved to be important to increase investment in the sector and thus attract more tourists. Turkey has a promising tourism potential which could be exploited to the full with immense benefits in terms of foreign exchange returns given the "high spending" per tourist in the country and the increasing number of east European shoppers. Economic liberalisation had a positive effect on foreign investment in this industry where the sector needs both capital and managerial expertise. In addition, there is a need to increase charter flights, accommodation facilities, occupancy rates in Turkish managed hotels, promotion abroad, and infrastructure so that domestic tour operators can compete with foreign ones.

Which economic system is better for Turkey? It is difficult to say since the policies adopted before and after 1980 had their own distinctive blessings and evils. However, one can say that Turkey, despite the current threats to its relative economic success, is on the right track in terms of demand and supply determined prices which would enable the country to be a regional economic power given its potential and assuming that existing problems are solved. The GAP project may make an important contribution to the Turkish economy by the turn of the century, but the existing economic instability of the country may undermine that achievement. The fact that Turkey is now more integrated in the world economy means that it is more vulnerable to global peaks and troughs being reflected back home more than ever before. Moreover, since the demise of the Soviet Union and its related inward-oriented economic ideologies, it is clear that Turkey has reached the point of no return. Turkey has now to make the best of its new economic system. The Declaration of the Black Sea Economic Co-operation could

be a positive step forward opening new markets for Turkey to increase its exports which would contribute to economic growth. Also, the new treaty is expected to intensify the transfer of western technology and capital through Turkey. This may be a factor that would raise the per capita income in Turkey and hence facilitate its accession to the EC if the political barriers (disputes with Greece, human rights record, ...etc.) were overcome. Also, the establishment of the customs union with the EC by 1996 is considered an important step forward which would prepare Turkey for full membership; especially now that most of its industries are competitive in Europe.

8.3 The Policy Implications of Liberalisation

The post-1980 liberalisation policies were analysed on the basis of the effects of changes in a set of economic variables (trade, inflation, exchange rate, industrial production, ...etc.). However, three important factors have not so far been discussed although they have been directly affected by the 1980 economic reforms. This section will briefly look at the implications of liberalisation on Turkey's external debts and foreign investment.

8.3.1 Foreign Debts

There is no doubt that the inflow of foreign funds whether from official (governments and international organisations) or private (banks) sources was an important factor in Turkey's economic recovery in the past decade. However, the cost was high with a tripling of external debts from about US\$ 13 billion in 1979 to about US\$ 46 billion in 1992, with consequences in terms of the financial drain on Turkey's foreign exchange revenues to service these debts. In this respect, a

question that may be raised here is the cause of economic recovery. Was it the inflow of foreign funds or the change in the economic system or both? Another question is what would have happened if the same injection of foreign exchange had taken place in 1979? On the whole, although the increase in foreign debts may be considered one of the negative consequences of liberalisation, one may say that Turkey under the new system is well placed to service that debt. Under the old economic system capital flows may have merely postponed the crisis, not solved it given the distortions in the market due to economic mismanagement at the time.

8.3.2 Foreign Investment

It was expected that the liberalisation of the Turkish economy would, as a result, attract foreign investment into the country providing Turkey with the foreign capital and managerial expertise. However, despite the increase in foreign capital flows from about US\$ 300 million in 1981 to about US\$ 1.5 billion in 1991, the performance of foreign investors in Turkey in terms of total capital invested is still unsatisfactory. This may be largely due to the economic instability (mainly continuing inflation and depreciation in the Turkish lira) and high interest rates which are critical issues in the decision-making of investors. Another factor may be the internal dispute regarding the desirability of the involvement of foreign capital in the privatisation process. Most of the foreign capital (about 60%) is invested in the manufacturing sector (OECD Economic Surveys, 1990/1991) which is the kind of investment that Turkey desperately needs. Hence, an increase in the inflow of foreign capital would definitely help Turkey's economic development, eventually reducing both the current account deficit and the unemployment problem. In that respect, the establishment of the customs union with the EC may substantially

help increase the inflow of capital as foreign investors (such as Japan) would take the opportunity of cheap labour in Turkey and the ability to market their products in Europe at the same time.

8.4 Research Recommendations

From what preceded it is clear that the Turkish economy is still in an unbalanced position. Accordingly, the following suggestions may help increase the advantage of structural adjustment, stabilise variables such as inflation and the exchange rate, and increase the growth of the economy:

- Increase domestic and foreign investment in most sectors; especially manufacturing and tourism by relaxing bureaucratic measures.
- Adoption of a realistic and stable exchange rate and monetary policy which would reduce inflation and increase investment and growth.
- Intensification of the pace of reform of the SEEs by more privatisation and rationalisation of costs (even at a short-run cost of unemployment) and prices to increase efficiency.
- Development of the domestic capital markets to increase the financial resources available to finance the public sector borrowing requirement and to meet the demand for loans from domestic investors (especially industrialists) which would reduce interest rates.
- Reduction of the PSBR by reducing expenditure (mainly on the SEEs) and increasing revenues by more efficient management of tax collection and tightening the screws on tax evasion.

- Increase industrial production by increasing the industrial base and more efficient utilisation of the still untapped resources of different sectors and sub-sectors such as forestry, livestock, tourism, transport, and transit and depot facilities.
- More investment in open-end (rotor) cotton spinning and shuttless looms due to better quality and less costs involved which would maintain Turkey's market share in Europe.
- Reducing the use of labour in agriculture and more investment in agricultural subsectors such as packaging and agro-industries.
- Update the machinery used in manufacturing and using modern techniques in fabric processing; especially for dyeing and colouring which would raise the quality and the export value of the product.
- Development of a retail network distribution for Turkish exports abroad by opening branches for main exporters in major export markets.
- Increase promotion for tourism in addition to charter flights and the number and occupancy rates of accommodation facilities.
- Increase exports with an emphasis on diversifying the composition of the products exported. This combined with a reduction in imports by having a carefully prepared tariffs policy; especially on consumption and agricultural products, would reduce the current account deficit.
- Greater incentives for research and development (R&D) mainly in industry.

- Labour training in industry, increasing the number and improve the quality of training of employees in the tourism sector, and more technical and extension services for farmers.
- More liberalisation of agricultural prices, increasing the quality and quantity of seeds produced, land reform, and allowing foreign transport companies access to the Turkish market.
- More security in the south east of the country to maximise the benefit from the GAP project.

8.5 Topics for Future Research

Several issues remain of great importance to give an overall picture of the impact of liberalisation on the Turkish economy, these are mainly:

- An extrapolation of the impact of the inflow of capital (that occurred after 1980) on the Turkish economy before 1980 and without structural adjustment.
- An up-to-date study of the social and distributional impact of adjustment.
- The impact of the government's crowding-out effect on investment decisions and the resulting financial strain on the domestic capital markets.
- The optimal interest rate, exchange rate, and tariffs necessary for the maximisation of economic growth.
- An extrapolation of real output, employment, and inflation with and without devaluation (with consumption-reducing measures instead) to determine the effect on the balance of payments.

Finally, although this study was prepared for Turkey specifically, there are many aspects of its economy which are found in other developing countries. Thus, the above recommendations and topics for future research may be useful for many countries that have already started or about to embark on a structural adjustment programme.

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