## STRUCTURAL ADJUSTMENT AND EMPLOYMENT IN THE MIDDLE EAST AND NORTH AFRICA

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# Structural Adjustment and Employment in the Middle East and North Africa

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#### ABSTRACT

Since the 1980s, the majority of countries in the MENA region facing severe exchange shortages have had to adopt policies directed towards stabilization and structural adjustment of their economies. Employment expansion and the structure and function of labor markets in these economies has been closely tied to the nature of the adjustment programmes pursued. The paper provides a country classification of the economies of the MENA region on the basis of size, economic structure and resource endowment to expose the timing of and interlinkages between growth cycles. Current unemployment problems are shown to be clearly related to the slowdown of the rate of investment and growth caused by serious internal and external imbalances in the post oil boom era, with Egypt taken as an example of the problems adjustment programmes face in addressing adverse external shocks and labor market behavior since the late 1980s. Turkey and Morocco, with the longest regional experience of adjustment, are also examined in some detail, and the implications of their experience for employment expansion are explored, with lessons drawn for other countries of the region.

ملخص

منذ الثمانينات كان على معظم دول الشرق الاوسط وشمال افريقيا والتي واجهت نقصا حادا في العملات، ان تتبنى سياسات موجهة نحو التثبيت والاصلاح الاقتصادي. فتوسع التوظيف وهيكل وحركة اسواق العمل في هذه الاقتصاديات اظهرت بانها مرتبطة بطبيعة برامج الاصلاح المتتابعة. وقد لعطت الورقة تقسيما لاقتصاديات دول الشرق الاوسط وشمال افريقيا على اساس الحجم، والهيكل الاقتصادي، والموارد الطبيعية، وذلك لتوضيح التوقيت والترابط مابين دورات النمو. فمشاكل البطالة اظهرت علاقة واضحة ببطء معدل الاستثمار والنمو وذلك بسبب اختلالات داخلية وخارجية في مابعد الطفرة النفطية، مع اخذ مصر كنموذج للمشاكل التي واجهت برامج الاصلاح لتعرضها لصدمات معادية خارجية وسلوك سوق العمل فيها منذ اواخر الثمانينات. وقد تم اختبار التجربة الطويلة لبرامج وسلوك المقال معان التي واجهت الاملاح لتعرضها لمدمات معادية خارجية وسلوك سوق العمل فيها منذ اواخر الثمانينات. وقد تم اختبار التجربة الطويلة لبرامج الاصلاح الاقتصادي لتركيا والمغرب بالتفصيل حيث تمت دراسة تأثيرات تجربتهما على توسع العمالة مع الدروس المستفادة التي يمكن تطبيقها في دول اخرى في المنطقة.

### CONTENTS

Page

1.	Introduction	1
2.	Economic adjustment and the labour market	2
	Labour market flexibility and the effectiveness of adjustment policies Adjustment policy and employment generation Alternative perspectives	2 5 6
3.	Oil income, economic interdependence and growth cycles in the MENA region	8
	Asymmetric interdependence and the effect of the oil shock	12
4.	Growth, structural change and employment in the MENA region	14
5.	The experience of Egypt	21
	The labour market through boom and recession	27
6.	The experience of Turkey	33
	The labour market and the adjustment process	37
7.	The experience of Morocco	44
	The labour market and the adjustment process	49
8.	Concluding remarks	55
	Tables	

Bibliography

#### 1. INTRODUCTION<sup>1</sup>

The countries of the Middle East and North Africa region (MENA), exhibit some of the fastest rates of growth of labour force in the world economy. Combined with the slow down in the rates of growth of investment and output in the economies of the region since the early 1980s, this has given rise to mounting problems of unemployment and underemployment of labour. In addition to the adverse external shocks, many of the economic imbalances which have led to the slow down of the growth process during the 1980s appear to be closely connected to the development experience and macroeconomic policies pursued during the 1970s and the 1960s decades in various countries in the region. In this paper we shall discuss the problems of employment expansion in the context of the processes of growth and structural change in various MENA countries during the boom and recession over the past three decades.

Since the early 1980s the majority of countries in the MENA region, facing severe foreign exchange shortages, have had to adopt policies directed towards stabilization and structural adjustment of their economies. Consequently, the question of employment expansion in these economies has been closely tied to the nature of adjustment programmes pursued in different countries. The structure and functioning of the labour markets in the region have also played an important role in the working of the adjustment policies pursued. In the next section we shall thus begin the paper by a brief analytical discussion of the role of the labour markets in the adjustment process.

Section 3 provides a country classification of the economies of the MENA region This on the basis of their size, economic structure, and resource endowments. classification is essential for a meaningful and manageable analysis of the economic problems of countries with diverse economic structures in a regional context, and helps in the exposition of the timing of and interlinkages between growth cycles of the various economies of the region. This is followed in Section 4 by a discussion of growth and structural change and employment expansion during the oil boom and its aftermath in the The current employment problems are identified to be closely related to the slow region. down of the rate of investment and growth in the MENA region economies caused by the serious internal and external imbalances in the post-oil boom era. Hence the future employment prospects in the region appear to depend on the nature and success of the adjustment policies embarked upon in different countries at different times over the past The experience of Egypt, with a dominant public sector, inward oriented decade.

<sup>1</sup> This is a revised and extended version of the paper presented at the ILO/UNDP Expert Meeting on Economic Policy and Employment, Geneva, 26-27 May 1994. I am grateful to Ajit Bhalla, Heba Handoussa, Aziz Khan, M. Muqtada, Samir Radwan, Peter Richards, Oktar Turel, and other participants in the Geneva Meeting for their valuable comments on the earlier draft of this paper (Karshenas, 1994). The views expressed in this paper are however the sole responsibility of the author and not necessarily shared by the ILO or the UNDP.

industrialization policies, and a receiver of massive amount of external resources following the oil boom, epitomizes the problems of adjustment to the adverse external shocks in various other late adjusting countries in the region as well. In Section 5 we shall therefore provide a more detailed discussion of the labour market behaviour in Egypt during the boom and recession, and examine the employment prospects of the Egyptian economy under the adjustment policies pursued since the late 1980s. Of all the countries in the MENA region, Turkey and Morocco have had the longest and most far reaching experience of adjustment since the early 1980s. In Sections 6 and 7 we shall thus examine in some detail the experience of adjustment in these two countries, with special attention to the role of the labour market in their adjustment and the implications of economic adjustment for employment expansion. In Section 8 we conclude the paper by a summary discussion of the lessons which the experience of Turkey and Morocco may have for the rest of the countries in region which started their adjustment programmes in more recent years.

#### 2. ECONOMIC ADJUSTMENT AND THE LABOUR MARKET

In considering the role of the labour market in the adjustment process it would help to examine the two-way interaction between labour market behaviour and the adjustment policies in turn; i.e. on the one hand, the way the labour markets affect the working of the adjustment policies in generating the conditions for sustainable growth of the economy, and on the other hand, the way in which the various adjustment policies affect employment, work conditions, and labour remuneration, and hence establish themselves as credible and politically viable policies. These two aspects of the labour market/adjustment policy interactions are of course interrelated and as we shall see below, they cannot be discussed in isolation. The distinction, however, is useful for analytical clarity and ease of exposition, and could help in underlining the various transmission mechanisms through which the labour market policies and other adjustment policies interact. We shall begin by a discussion of the first aspect, that is, the role of labour market flexibility in the effectiveness of different adjustment policies.

# Labour market flexibility and the effectiveness of adjustment policies

There has been a considerable debate on appropriate adjustment policies for developing countries with serious external and internal imbalances, which has given rise to a voluminous literature on this topic over the past two decades. Our aim in this section is not to review this literature nor to appraise the pros and cons of different positions on this subject. The latter task is best left to the empirical sections of the paper. To begin with, in this section we shall examine the different elements of what has come to be known as the conventional adjustment package, favoured by the IMF and the World Bank, and implemented wholly or partially, and with different degrees of intensity, in different countries in the MENA region since the early 1980s. In each case we shall examine the impact of labour market flexibility on the effectiveness of that particular policy. The conventional adjustment programmes are mainly concerned with two dimensions of labour market flexibility, and the other refers to restrictions on hire and fire of labour. Wage flexibility for our present purposes could be interpreted in a broad sense to include non-wage costs to the employers such as social insurance contributions and pensions.

Stabilization policies. The conventional adjustment policies in the initial stages normally contain a deflationary element which aims at reducing budget deficits and the overall domestic absorption relative to the national income. Government expenditure cuts, credit restrictions, and devaluation of the exchange rate have been the main policy tools for stabilization<sup>2</sup>. Labour market flexibility is an important determinant of the relative effectiveness of these different measures. With strong real wage resistance in the public sector and the inability of the government to trim down the size of its administration and check its growth, government expenditure cuts would have to fall largely on government investment. And if this cuts into essential government socio-economic and infrastructural investment it would bring down long term growth and employment generation in the economy.

Similarly, real wage stickiness in the private sector, which may be due to the government wage policy or union power, could lead to cost price spirals following nominal devaluations, thus preventing a real devaluation of the exchange rate to take place. In this case, to reduce the rate of the overall domestic absorption the government may have to resort increasingly to domestic credit controls, and the main burden of stabilization would have to be taken by private investment rather than consumption, with long term adverse implications for output and employment growth. The inflationary pressures in the economy following nominal devaluations in this case may lead the government to resort to further credit controls, above and over what was deemed necessary for alleviating the original internal and external imbalances in the economy.

<sup>&</sup>lt;sup>2</sup> Whether devaluations would be contractionary or expansionary depends on the structure of the economy concerned and the income distributional effects of the devaluation. In the mineral exporting countries in the MENA region, specially with large current account deficits during the 1980s, devaluation is likely to be deflationary in the short run, given the government's fiscal stance.

When the adjustment problem is predominantly one of the rate of domestic absorption being high relative to the national income, deflationary policies may suffice to reinstate the resource balance in the economy. In that case, as discussed above, the impact of labour market flexibility, or lack of it, largely takes the form of a trade-off between higher real wages and consumption against higher employment and/or investment. This is, however, far from the case in developing countries, particularly those of the MENA region, where the balance of payments and budgetary imbalances are only reflections of deeper structural problems in the economy. In that case, to rely merely on deflationary stabilization policies will only succeed to reinstate external balance at the expense of creating serious internal imbalances in the form of mass unemployment and total disruption of investment activity in the economy. As a consequence, stabilization measures are normally combined with structural adjustment policies which aim at the medium- and long-term restructuring of the economy.

Structural adjustment policies. Inward looking industrialization policies over long time periods, large price distortions in product and factor markets, and the dominance of public sector economic enterprises in industrial production, are identified as some the main sources of structural imbalances in the developing countries. It has been furthermore argued that the distorted economic structure inherited from the past has been a main source of difficulty of adjusting to the external shocks during the 1980s. The conventional adjustment policies have thus contained strong marketization and price liberalization These normally consist of: the liberalization of the product markets through elements. reduced government interventions and subsidies, and foreign trade liberalization; devaluation of the exchange rate followed by more flexible exchange rate policy; greater labour market flexibility both in terms of wage determination and restrictive labour financial liberalization; liberalization of foreign capital transactions; and legislation; privatization of the state economic enterprises. These policies, by changing the incentive structure in the economy and creating the appropriate supply stimuli, are expected to correct the fundamental structural imbalances and lead to fuller utilization of resources and better allocative and productive efficiency in the economy.

In this policy package, labour market flexibility, apart from having a direct impact on fuller and more efficient utilization of labour by influencing the demand for labour and the technology mix at the microeconomic level, also plays an important role in the effectiveness of other policies in the package. For example, foreign trade liberalization combined with a real devaluation of the exchange rate is meant, amongst other things, to lead to a shift of resources from the non-traded to traded goods sectors and to stimulate foreign trade (exports). As noted above, however, without the required real wage flexibility a real devaluation of the exchange rate and the change in the relative prices in

4

favour of traded goods would become difficult to achieve. Similarly, restrictive labour legislation may reduce labour mobility and hence retard the shift of resources between activities and sectors that the adjustment package is meant to bring about. If such legislation makes it difficult to regard labour as a variable cost to the employers, it is also likely to prevent the adjustments in the technology mix and the capital intensity of production which the conventional policy package is supposed to bring about. The privatization of the state economic enterprises which suffer from overmanning may also become difficult if labour legislation makes it too costly for the employers to trim down their labour force.

Labour market flexibility therefore seems to play a key role in the speed and extent of the structural adjustment that the conventional adjustment policies are supposed to bring about. Apart from generating the structural conditions for sustainable growth the conventional adjustment policies are also meant to give rise to fuller and better utilization of labour in the economy. The mechanisms through which the structural adjustment policies are meant to affect employment are discussed next.

#### Adjustment policy and employment generation

The impact of the stabilization component of the adjustment policies on employment has already been discussed above. In countries where external imbalances are due to high levels of domestic expenditure relative to the national income, economic adjustment takes place largely through deflationary stabilization policies. The impact on employment as discussed above depends on the flexibility of the labour market, and in particular on wage flexibility, through a trade-off between lower consumption and real wages against lower employment and investment. Considering, however, that in most developing countries, and particularly in the countries in the MENA region, external imbalances are often combined with large scale unemployment and underemployment of labour, stabilization policy will not be adequate to reinstate internal and external balance. Structural adjustment policies would have to form the more important component of adjustment and their employment implications assume added significance in such economies.

The conventional structural adjustment programmes can affect employment through their impact on, (i) the rate of investment and the overall growth of the economy, (ii) the structure of investment and output, and (iii) the labour intensity of productive activities. While the first effect is expected to change employment through changes in the overall growth of the economy, the latter two effects work through changing the output elasticity of employment.

5

Within the theoretical framework underlying the conventional adjustment programmes, the level and growth of output is in general seen to be supply constrained rather than being demand driven. With the removal of price distortions and restrictive policies, fuller and more efficient utilization of resources is expected to lead to higher output. Increased output and higher interest rates resulting from financial liberalization are expected to generate a higher rate of savings which would be translated into higher rates of capital formation and growth. At the same time the removal of price distortions in the product and factor markets are expected to increase the output elasticity of employment in the economy in two ways. First, trade liberalization according to the conventional trade theory, is expected to lead to a restructuring of output towards more labour intensive activities where the developing countries have comparative advantage. Secondly, the higher cost of capital relative to labour, resulting from the combination of trade liberalization, exchange rate devaluation, financial liberalization and higher labour market flexibility, is expected to lead to the adoption of more labour intensive techniques of production in all the sectors or activities.

#### Alternative perspectives

The conventional adjustment policies seek to correct the imbalances in the economy through a more extensive and `free' operation of the market mechanism. The theoretical underpinnings of the conventional adjustment programmes are largely based on comparative static exercises with simple models of a market economy in competitive The adjustment process, however, is a dynamic process involving the equilibrium. interaction between different markets in disequilibrium, and major institutional changes 'rules of the game'. A great deal of research in recent continuously transforming the years has been concerned with the dynamics of the adjustment process, notably the impact of the sequencing and the speed of the introduction of various adjustment policies. As noted above for example, the lack of labour market flexibility can hinder the operation of various other liberalization and adjustment policies. Once the full dynamics of the interaction between various adjustment policies is introduced into the picture, however, the issues become too complex and context-specific to be handled at the theoretical level. But before entering the empirical discussion we need to point out a number of qualifications which a dynamic perspective introduces in the conventional treatment of the role of the labour market in the adjustment process discussed above.

A major handicap of the comparative static analyses which form the theoretical bases of much of the conventional adjustment programs lies in their inadequate treatment of the savings and investment processes in the economy, which are essentially dynamic

As noted above, in the conventional model investment is regarded as savings processes. constrained, and hence financial liberalization through higher interest rates is expected to increase savings and capital formation in the economy. However, once we introduce the role of expectations, possible complementarities between public sector and private sector investment, dynamic economies and externalities, the rate of investment would become demand determined rather than supply constrained. High interest rates in that case can hinder investment and lead to Keynesian type unemployment. Similarly, real wage reductions rather than being employment enhancing can lead to higher unemployment through their demand side influences. This latter process can be particularly important in economies with a low degree of industrialization where export expansion resulting from the outward oriented industrial policies may not be adequate to compensate for the deflationary impact of the real wage cuts. As we shall observe in Section 7, the available evidence suggests that this may have been the case in the adjustment process in Morocco amongst the MENA region economies.

The existence of complementarities between private and pubic investment, of which there seems to be strong evidence in the empirical literature, can also introduce obvious modifications in the way the conventional adjustment programme is expected to This, however, refers to a more general problem which is inherent to the full operate. employment equilibrium models underlying the reasoning in the conventional adjustment Within such models where resources are fully employed and production programmes. technologies are given, outputs of different economic activities or sectors become substitutes, in the sense that higher growth in one sector has to be at the expense of output growth in other sectors of the economy. This has had important implications for the role of labour market flexibility as envisaged in the conventional adjustment programme, with the main emphasis being put on the mobility and speed of substitution of labour between the traded and non-traded goods sectors in the economy. Accordingly, a more limited definition of labour market flexibility (confined to wage flexibility and ease of dismissal of labour) is considered rather than a broader definition which a more dynamic view of the adjustment process would require. Within such a dynamic view the adjustment process is seen as a process of employment creation for new entrants in the labour market as well as for the existing surplus labour in the economy, and a shift of labour from old to new production and technological processes. Labour training and learning thus become central aspects of labour market flexibility. Greater casualization of labour and lack of regular employment which within the conventional adjustment programme is regarded as conducive to labour market flexibility, thus becomes a hindrance to such flexibility by reducing the incentive to learn on the part of the worker and to provide training on the part of the employer.

7

# 3. OIL INCOME, ECONOMIC INTERDEPENDENCE AND GROWTH CYCLES IN THE MENA REGION

The MENA region is composed of national economies with diverse economic structures and resource endowments. Despite such diversity, the increasing interdependence between these economies over the past three decades, as well as a shared history and culture which has created various institutional affinities between them, would make a regional approach to the employment problems of these economies fruitful. On the basis of size, resource endowment, and economic structure, one can divide the countries in the region into four broad groupings; namely, the low absorption oil economies, the high absorption oil economies, the large non-oil economies, and the small non-oil economies (see, Table 1).

Low absorption oil economies. This group consists of seven low population, high income countries: Saudi Arabia, Kuwait, UAE, Bahrain, Qatar, Libya and Oman. In terms of income per head these countries have been close to high income industrialized countries, but their economic structure is very different from the latter. Their high income over the past three decades has been largely derived from oil exports rather than industry and agriculture. The combined share of manufacturing and agricultural output in GDP for the group as a whole in the mid-1980s was no more than 5.6 per cent (1.1 per cent agriculture, and 4.5 per cent manufacturing). Lack of complementary domestic resources such as labour and agricultural land has meant that, at least up to the mid-1980s, they did not have the absorptive capacity to invest all of their oil income in the domestic economy. As a consequence they accumulated large foreign exchange reserves and foreign assets over time.

This group of countries, containing only 6-7 per cent of the population in the region, controlled more that 30 per cent of the GNP of the region during the 1980s decade. They are labour shortage economies which draw on large reserves of migrant labour from the neighbouring countries. By the end of the 1980s decade more than 44 per cent of the population of the Persian Gulf countries in this group is estimated to have been composed of foreigners. In 1985, 3-4 million foreign workers are estimated to have been working in these Gulf states, about 55 per cent of which came from other Arab countries in the region.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> In countries such as Kuwait, Qatar and the United Arab Emirates, more than 80 per cent of the work force in the late 1980s was composed of expatriate workers, while the ratio for other Gulf states in Group I was above 40 per cent. In Libya in the early 1980s about 30 per cent of the labour force was composed of expatriate labour. See, Feiler (1994), Richards and Waterbury (1990, ch.14, pp.374-400), Sherbiny (1984a), and Birks and Sinclair (1980) for more detailed discussion of labour migration in the region.

The group of low absorption oil economies is composed of extremely open economies where during the 1970s and the 1980s decades exports constituted between 60 to 70 per cent of the GDP for the group as a whole. More than 90 per cent of their merchandise exports, however, has been destined for the outside of the region, and about 90 per cent of their imports comes from outside the Middle East and North Africa. This has produced an asymmetric interrelation between this group of countries and the rest of the region; While autonomous changes in demand in other countries in the region has had a negligible impact on this group's export revenue and income, the fluctuations in investment and trade in the first group has had important implications for the rest of the region, due to strong reliance of some of the other countries in the region on this first group as an important source of foreign exchange revenue.

Given that the economies in this group are labour shortage economies without having an `employment problem' in the normal sense of the term, we shall not dwell at length on the employment problems in these countries in this study. Of course, as mentioned above, the developments in these economies are of critical importance to growth and employment in other country groups in the MENA region, and to this extent a treatment of the role of these countries in the regional economy of the Middle East and North Africa is indispensable.

High Absorption Oil Economies. This group consists of three countries, Algeria, Iran and Iraq, as shown in Table 1. Similar to the first group, more than 90 per cent of the exports of this group consists of hydrocarbon based exports. In contrast, however, this second group has a more differentiated production structure due to the larger size of its economies, relatively more abundant complementary land and labour resources, and a longer industrialization experience. The combined share of industry and agriculture in GDP in this group has been 40-50 per cent over the 1970s and the 1980s decades.

This group as a whole commands about 30 per cent of the income, with 30 per cent of the population, of the MENA region. Given the much higher degree of absorptive capacity in this group of countries, as compared to the first group, they are more immediately dependent on their oil export revenues, with their oil export industry operating closer to full capacity, and with foreign exchange rather than labour being the main constraint to growth during much of the past three decades.<sup>4</sup> More than 50 per cent of the labour force in this group as a whole was engaged in the agricultural sector during

This was, of course, with the exception of oil boom years of 1973-75 and 1979-81, when temporary balance of payments surpluses appeared for the countries in the group, and when due to the extremely rapid expansion of demand for labour and the development of mismatches between supply and demand for labour resort was made to importation of migrant workers. The highest rate of labour inflow in this period in this group of countries happened in Iraq, where according to Richards and Waterbury (1990, p.382) in the early 1980s, 750,000 migrant workers are reported to have been working in the country, forming about 25 per cent of the labour force.

the 1960s. Unlike the group of low absorption oil exporters, in this second group the problem of employment generation for the surplus agricultural labour and the new additions to the labour force, rather than labour shortages, constitutes the main employment problem for these countries.

Large Non-Oil Economies. The third group consists of five large non-oil economies - namely Egypt, Morocco, Sudan, Syria and Turkey - which constitutes more than 50 per cent of the population, but commands no more than 25 per cent of the GNP in the region (Table 1). The countries in this group on average have a lower per capita income than the first two groups, but their economies are characterized by a higher degree of diversification both in structure of production and foreign trade. The combined share of agricultural and industrial production in total GDP in these countries was close to 50 per cent during the 1970s and the 1980s decades, and with the exception of Egypt and to some extent Syria, hydrocarbons have little or no share in the merchandise exports of this group.<sup>5</sup>

Two important characteristics of the countries in this group stand out; first, the growing degree of dependence of these economies on the oil economies, particularly of Group 1 countries, during the oil boom; and second, their being surplus labour economies as indicated by the high share of the labour force in the agricultural sector.<sup>6</sup> Since the 1970s, the surplus labour economies in this group have provided a large, and until the late 1980s growing, number of migrant workers, particularly to the low absorption oil exporting economies in the MENA region itself.<sup>7</sup>

The economic interdependence between the countries in the MENA region has grown substantially since the 1960s. One channel of such increased interdependence, as shown in Tables A2, has been the growing trade linkages between the MENA region countries since the 1970s, as particularly reflected in the increased share of exports from country Group 3 destined for the other countries in the region. In particular Turkey's share of exports to the Middle East increased from about 10 per cent in 1970 to close to 30 per cent by the late 1980s.<sup>8</sup> The share of exports from Egypt and Sudan also increased from about 8-

<sup>&</sup>lt;sup>5</sup> Production of oil in Egypt increased from about 23 million tons in 1970 to about 30mt in 1980 and 45mt in 1989. In the Mid-1980s fuel exports formed about 38 per cent of the exports of goods and non-factor services.

<sup>&</sup>lt;sup>6</sup> For example, in 1965 the share of agricultural labour in total labour force in Egypt, Morocco, Sudan, Syria, and Turkey were, 55 per cent, 61 per cent, 82 per cent, 52 per cent and 75 per cent respectively.

<sup>&</sup>lt;sup>1</sup> Egypt is the largest supplier of migrant workers in this group, followed by the Yemen and the Sudan. For example, in the late 1980s the number of migrant workers from Egypt working in other countries of the MENA region is reported to have been above 3 million, about 2 million of whom worked in the GCC countries. For more details see the sources quoted footnote 3 above.

<sup>8</sup> Turkey's merchandize exports to the MENA region peaked at about 3.4 billion U.S. \$, constituting about 45 per cent of her total exports, in the mid-1980s. Exports to MENA region gradually fell from the mid-1980s, to about 2.8 billion

9 per cent in the early 1970s to 20-25 per cent in the late 1990s. Morocco in this group has the lowest trade linkages with the rest of the MENA region, and despite the rapid increase in the share of its exports to the region, from less than 2 per cent in 1970 to about 8 per cent in 1990, it still has a low degree of integration with the rest of the countries in the MENA region.

Merchandise trade is not the only channel, and in case of many countries not even the most significant channel, of increasing interdependence between this group of economies and the rest of the countries in the region over the past three decades. Linkages through invisible trade and factor services form other important channels of interdependence. In the case of Egypt for example, even in 1990, when visible export share to the MENA region was at its peak, these exports constituted no more than 7 per cent of the value of export of goods and services. On the other hand, however, regional dependence of the country through factor services and invisible trade was very strong. Foreign exchange revenues from migrant workers remittances increased just over 3 per cent of merchandise exports in 1970 to about 70 per cent in 1980 and over 120 per cent in 1989 (Table A3). Revenues from transit fees of the Suez Canal increased to more than 30 per cent of merchandise exports by the early 1980s. Both these sources of revenue were highly linked to economic activity in the rest of the MENA region. Migrant labour remittances also formed important sources of foreign exchange revenue for other countries in this group, i.e., Turkey, Syria, Sudan and Morocco (Table A3). Though in the case of Turkey and Morocco remittances came mainly from outside the MENA region (from Germany and France respectively), the share of remittances flowing from the labour shortage oil exporters in the MENA region to these two countries was noticeable during the oil boom years.<sup>9</sup> This is partly reflected in the substantial increase in labour remittances as a percentage of merchandise exports in Turkey during the oil boom years of 1973-75 and 1979-80 as shown in Table A3.<sup>10</sup>

Small Non-Oil Economies. This group consists of five countries, Lebanon, Israel, Jordan, Yemen and Tunisia, with varied structures. In terms of both per capita income and economic structure Israel stands out in this group as being more similar to the high income industrialized countries than the developing countries in the Middle East. Excluding Israel, this group of countries forms about 10 per cent of the population but less than five per cent of the national income in the MENA region. The small size and the open nature of these economies makes them highly dependent on economic activity in the region as a whole. This is at one level indicated by the very high share of exports of this group of countries

U.S. \$ or 20 per cent of exports, by 1992. The bouyancy of exports to the MENA region during the early 1980s was partly due to the Iran-Iraq war.

<sup>9</sup> Turkish labour migrants in MENA peaked at about 23 per cent of total migrant labour from the country in 1983. This proportion fell to 14 per cent in 1988 and 12 per cent in 1992.

<sup>10</sup> The increase in remittances during these two periods also reflects the effect of the devaluation of the Turkish lira.

going the MENA region (Table A2). Though there has been an overall decline in this share over the 1970-90 period, the dependence of this group of countries on the rest of the economies in the region through factor movements and non-factor services has been growing since the 1970s. In the case of Jordan remittances from migrant labour working in the rest of the MENA region fluctuated between 100 and 200 per cent of the value of the country's merchandise exports. Jordan also depended heavily on the oil exporting countries in the region in terms of revenues from transit trade and also direct capital aid during the 1970s and the 1980s decades. Yemen also depended heavily on the oil surplus economies in the Persian Gulf (mainly Saudi Arabia) in terms of labour remittances, with remittance inflows of more than 100 per cent of merchandise exports in 1990. As in the case of Morocco in Group 3 countries, Tunisia appears to have a lower degree of integration into the regional economy, certainly with respect to trade, and to a lesser extent with respect to labour remittances. However, since between the mid-1970s to the mid-1980s Tunisia benefited from relatively large oil export revenues, its economic performance was closely tied to the oil economy of the region.<sup>11</sup>

#### Asymmetric interdependence and the effect of the oil shocks

The above discussion suggests an asymmetry in the transmission of economic shocks between the countries in the MENA region; starting from the oil economies at the top, particularly Group 1 countries, and flowing down to the small non-oil exporters at the bottom. Economic conditions in the oil economies at the top of the scale almost exclusively depend on the developments in the world economy beyond the MENA region, specifically those in the international oil market, while the non-oil economies further down the scale are to varying degrees influenced by economic conditions within the oil economies. This asymmetric interdependence which seems to have particularly strengthened during the oil boom years of the 1970s, has meant that the fluctuations in the oil export revenues in the region have had important implications for the non-oil economies in the region as well. The oil price boom of the 1970s created a strong boom in the region as a whole, even in the nonoil economies in country Groups 3 and 4. For example in the case of Turkey, despite a sharp deterioration in the international terms of trade after the first oil shock of the early 1970s, spurred by the fast increases in labour remittances and the rapid expansion of the regional export markets the government followed a highly expansionary policy by increasingly relying on foreign borrowing during the 1970s (see, section 6 below). The effect of the oil price boom of the early 1970s in the MENA region was magnified by the fact that it coincided with a general commodity price boom in the international markets, particularly the

<sup>&</sup>lt;sup>11</sup> Oil exports at their peak in 1980 formed about 38 per cent of exports and 21 per cent of government revenue. However, Tunisia's oil reserves are limited and since the early 1980s oil production has followed a declining trend and the country is close to becoming a net oil importer.

boom in the price of phosphate which was a major export item in the non-oil economies in the region. As a result, even in the case of Morocco with a low degree of integration in the regional oil economy, the boom in phosphate prices during 1973-75 period created a strong investment boom led by highly expansionary policies by the government which was the recipient of the export revenues from the phosphate sector.

During the 1980s decade, however, the decline in the MENA region oil export volume combined with the sharp fall in oil prices led to a collapse of the oil revenues for the region as a whole (Figure 1). During the 1980-86 period the oil export revenues for the region declined by more than 300 billion dollars, that is by 60 per cent of their peak value in 1980. Such a substantial negative shock to the regional economy has had important implications for all the countries in the region.

Amongst other effects, the post oil boom era has brought about substantial revisions in the development strategies for various countries. Up to the 1980s the prevalent development strategy in the MENA region, with the exception of the surplus oil economies in Group 1, has been a classic case of import substitution industrialization in economies which were predominantly primary exporting economies. Historically, direct public sector involvement in industrial production has also been an important feature of the import substitution industrialization process. With the collapse of the primary commodity prices since the 1980s, and in particular the combination of the price collapse together with the decline in the volume of oil exports from the region, new development strategies based on greater marketization and outward looking industrialization policies have been introduced in various countries in the region. The timing and the character of the adjustment policies, however, has varied between different countries depending on the nature of their integration in the regional economy and the policy responses by their governments.

The countries most severely affected by the negative oil shock of the 1980s were of course the large oil exporting countries in Group 2 -- as they were more immediately dependent on their oil export revenues compared to the surplus oil economies in Group 1 with large foreign exchange holdings, and also because over the decade they lost a considerable share of their oil export market to the Group 1 countries. The initial response in the case of Iran was to adopt severe import compression policies combined with wage compression, rationing, and increased government controls. The country witnessed a rapid decline in per capita consumption along with declining per capita income during the 1980s decade, as shown in Figure 2. It is only since the beginning of the 1990s decade that Iran has started adjustment policies towards market liberalization and outward orientation of its economy. The policy response of Iraq in this group of countries during the 1980s was to rely heavily on foreign borrowing, predominantly from the low absorption oil economies in the

region, in order to maintain consumption levels in the face of fast declining per capita income without introducing major adjustment policies. In Algeria the crunch came with the oil price collapse of 1986, and since then despite far reaching economic reforms and adjustment policies per capita consumption and income have been following a declining trend. In countries in Groups 3 and 4 which were closely integrated into the regional oil economy (e.g. Jordan and Egypt) or were themselves net oil exporters during the 1980s (e.g. Tunisia and Egypt) also serious adjustment programmes really got under way only in the latter half of the 1980s decade with the collapse of oil prices. On the other hand in the non-oil economies in country Groups 3 and 4, such as Turkey and Morocco, where there was also a lower degree of dependence on the regional oil economy, the need for reform was felt by the end of the 1970s decade, and with the second oil shock of 1979-80 economic adjustment and after an initial period of recession they have both shown sustained increases in per capita income and consumption over the adjustment period.

The developments in the labour markets in various countries in the MENA region have been closely intertwined with the processes of growth and structural change during two distinct phases; (i) the pre-1980s period characterized by rapid inward-oriented industrialization fostered by fast growth of primary commodity export volumes and prices, and (ii) the phase since 1980 which has witnessed sharp decline in primary commodity export volumes and prices and has been a period of economic adjustment and restructuring. Before examining the behaviour of the labour markets during these two phases in individual countries, we need to discuss a number of stylized facts in relation to employment and growth in the region as a whole in the next section.

### 4. GROWTH, STRUCTURAL CHANGE AND EMPLOYMENT IN THE MENA REGION

Fast rates of growth and structural change, propelled by large inflow of external resources, were achieved in the MENA region during the 1960s and the 1970s decades. Tables A4 and A5 show the rates of growth and structural change in sectoral output and labour force for selected countries in the country groupings 2, 3 and 4 in the region, along with those of other main developing country regions and groupings. As can be seen, during the 1965-80 period GDP growth rates in the MENA region as a whole and in most countries shown in Table A4, were above the averages for other regions with the exception of East Asia. The same picture is repeated for sectoral output growth rates, with a few individual exceptions, namely agricultural growth in Algeria and Iraq.

What stands out in the case of the MENA region is the sharp decline in the overall GDP growth rates and particularly those of manufacturing and services during the 1980s decade as compared to the 1965-80 period. Amongst the other regions in the world economy only Latin America, and to a more moderate scale Sub Saharan Africa, show a similar collapse of the growth process in the 1980s. Egypt and Tunisia managed to moderate the decline in economic growth during the 1980, but this was achieved through developing balance of payments and budget deficits which were clearly unsustainable in the long run. As can be seen from Figure 3, for much of the 1980s decade the two deficits in the case of Egypt were on average no less than 10 per cent of the GDP and in the case of Tunisia they fluctuated within the 5-10 per cent band. What is more significant is that such imbalances existed during a period when the growth of investment was brought to a virtual standstill (see, Table A7). Only in the two early adjusting countries, i.e. Turkey and Morocco, the decline in the growth rates of output were moderated while at the same time their foreign exchange gaps were kept at apparently manageable levels (see, Sections 6 and 7). Even in the case of these two countries, however, as can be seen from Table A7 growth of investment during the 1980s was only a fraction of the growth rates during the previous decade. Clearly, by the 1980s decade the fast rates of growth achieved during the previous two decades were no longer sustainable and short of major structural reforms even moderate growth rates which could maintain the per capita income levels had become problematic.

The fast rates of increase in primary commodity export revenues were only one of the conditions which allowed the rapid rates of industrialization and growth to be achieved in the MENA region during the 1960s and the 1970s decades. The other important factor was the availability of abundant supply of labour. As can be seen from Table A5, during the early 1960s in the MENA region as a whole more than 60 per cent of the labour force was engaged in the agricultural sector. With the exception of Jordan, in all the other countries listed in the table the share of agricultural labour force in total was at or above 50 per cent, and in the case of Turkey it was as high as 75 per cent. Though by 1980 substantial changes in the structure of employment had taken place, the share of agricultural labour force in the region as a whole was still as high as 45 per cent.<sup>12</sup> The relatively large shift of labour out of the agricultural sector together with high natural rates of growth of population, ensured an abundant supply of labour force during the high growth period of the 1960s and the 1970s decades. The remarkable degree of mobility of labour across the different countries in the MENA region, as noted in the previous section, ensured the availability of labour for the small oil surplus economies as well as alleviating the mismatches between the supply and demand for different types of labour within individual countries<sup>13</sup>.

<sup>&</sup>lt;sup>12</sup> The averages for the MENA region in Table A5 refer to the countries listed in the table.

<sup>&</sup>lt;sup>13</sup> One notable example of this was the case of Jordan which imported large numbers of Egyptian simple agricultural workers and exported substantial numbers of more skilled labour to the other countries in the region during the 1980s.

The overall structure of labour force in the MENA region both in 1965 and in 1980 is remarkably close to the structure of employment in the middle income economies shown in Table A5. The slight difference between the two country groupings is that the share of labour force in the agricultural sector for MENA as a whole in both years is higher than the middle income countries and the share of services is proportionately less. Of course the comparison between MENA which is a geographic grouping with heterogeneous economies, and middle income countries which is an economic grouping may not be appropriate. However, given the high degree of labour mobility between the MENA countries, the treatment of MENA as a broad country grouping may not be too far fetched in this context. The structure of labour force for individual countries within the MENA region shows a diverse pattern, with some degree of uniformity within the country groupings defined in the previous section. The high absorption oil economies in Group 2 show faster rates of structural change and a higher rate of labour force in industry and services as compared to the middle income countries in 1980. The large non-oil economies on the other hand seem to have a slower rate of structural change with a higher concentration of labour in the agricultural sector (Table A5). This may be explained by the faster growth of the oil economies and their higher per capita income levels during the period considered. In the small economies in the 4th group such as Jordan, Tunisia and Yemen no specific pattern seems to prevail except that they all exhibit fast rates of structural change. By 1980 Jordan had the majority of its labour force concentrated in the services sector, Yemen in agriculture, and Tunisia had almost a uniform distribution with the larger share in the industrial sector.

To what extent do the observed patterns of growth and structural change in the MENA region during the 1960s and the 1970s decades help to shed light on the problems of structural change and growth during the 1980s decade and after? The problems of structural change in economies such as those in the MENA region which have been subject to the inflow of large external resources has attracted considerable attention in the economics literature in the past few decades, particularly following the discovery of North Sea oil and gas and its impact on the industrial structure in economies such as Holland and the United Kingdom. This literature is predominantly concerned with the de-industrialization which took place in these two economies following the discovery of oil; the so called 'Dutch Disease' phenomenon. The Dutch Disease theory has become also influential in some recent literature on the economic development of the MENA region. The theory in simple terms can be described as follows: In an economy in full employment equilibrium a permanent increase in the inflow of external funds leads to a change in relative prices in favour of nontraded goods and against the traded goods, thus leading to the crowding out of the traded goods sectors such as industry and agriculture by non-traded goods sectors such as services. The mechanism through which this change takes place is based on the fact that in an economy in full employment equilibrium and with static technology the external funds can be translated into real domestic expenditure only if the flow of imports is increased. But since goods and services from the non-traded goods sectors cannot be imported readily (or can be but at a very high cost) a contraction in traded goods sectors is necessary for the resources to be released in order to enhance the output of the non-traded goods sectors. In the context of a growing economy this would imply a slowdown in the growth of traded goods sectors as labour, and other tight domestic resources are diverted to the non-traded goods sectors.

This process of structural change would be inevitable for an economy in full employment and with given technology. However, for the less developed countries where these two assumptions are unlikely to hold the predictions of the theory need not hold.<sup>14</sup> In the case of the MENA countries the availability of external resources during the 1960s and particularly the 1970s decade allowed a massive investment boom in traded goods sectors, namely manufacturing and agriculture, on a scale that would have not been otherwise As seen above agricultural and manufacturing growth rates during this period possible. compared favourably with the rest of developing country regions and with their own performance in other periods, both for the MENA region as a whole and for individual countries.<sup>15</sup> It was indeed in the post oil boom era that, as observed above, the overall investment growth was brought to a standstill and growth of output in traded goods sectors, particularly in manufacturing was substantially reduced in all the countries and specially in the major oil exporting ones. Surely during the investment boom years of the 1970s, growth of non-traded goods sectors such as construction and services in most countries in the region surpassed the growth in other sectors, but the former does not seem to have been at the expense of growth in traded goods sectors as the Dutch Disease theory would predict. It has been also the case that most countries in the region witnessed rapid rates of real wage increases as a result of the fast rates of growth of the non-traded goods sector during the 1970s boom. This, however, seems to have been counterbalanced by the rapid rates of labour productivity growth in the manufacturing sector, where the availability of external rents made it possible to maintain profitability and growth by increasingly relying on more productive imported technology of high capital intensity.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> The literature on Dutch Disease is vast. For some useful discussions and further references see, Corden (1984), Corden and Neary (1982), Gelb (1988), Edwards and Wijnbergen (1989), Gelb (1988), Scherr (1989) and Pinto (1987).

There were of course again individual exceptions such as agriculture in Algeria and Iraq, but these were mainly due to policy mistakes by the government rather than the inevitable result of the inflow of oil revenues.

<sup>&</sup>lt;sup>16</sup> The case of agriculture is more complicated as institutional factors play an important mediating link in the process. In addition, in the case of agriculture the impact of higher real wages should be set against the massive agricultural input subsidies and investments by the governments in the region during the oil boom years. The growth of agricultural sector, with the exception of Algeria, Iraq, and Morocco during the 1965-80 period compares favourably with the 1980s decade as well as with other developing areas in the same period (Table A4). The problems with the cases of Iraq and particularly Algeria were more to do with institutional and policy decisions, specially the centralized control by the government over agricultural production. The case of Morocco will be discussed in more detail in section 5.

To regard the structural problems in the MENA region economies at the end of the oil boom as merely or even largely arising from high real wages and the overdevelopment of the non-traded goods sectors relative to the traded goods sectors, as the Dutch Disease theory would have it, would tend to put too much of the burden of adjustment on real wage reduction. Surely with the collapse of the 1970s commodity boom, the prevailing real wages and overvalued real exchange rates in the MENA region were no longer sustainable and had to be reduced. If the structural problems of the MENA region economies were due to the over concentration of labour and other resources in the non-traded goods sector, such wage price adjustments would be sufficient to reinstate structural balance, with a time lag which would be longer or shorter depending on the labour market institutions and the mobility of labour. Two of the distinct empirical features, or stylized facts, about the labour markets in the MENA region on the supply side, however, signify the fact that the problems of adjustment in the labour markets go far beyond a mere substitution of labour between the traded and non-traded goods sectors. One of these stylized facts relates to the quantitative aspects and the other to the qualitative aspects of the labour force.

The first stylized fact which is highlighted in Table A5 is that the MENA region has the highest rate of growth of labour force amongst the developing countries. This is partly due to demographic factors, namely the high rate of growth of the population and particularly the working age population, and partly due to the low but growing labour force participation amongst women (Table A6, also see, Richard and Waterbury, 1990, Ch.4, and Al-Qudsi et al. 1993, Moghadam, 1993, Ch.2). The high rates of growth of labour force combined with the rapid shift of surplus labour out of the agricultural sector has implied rates of growth of labour supply for the non-agricultural sector of above 5 to 6 per cent per annum in most of the countries in the region. This poses a formidable task in terms of economic growth particularly in the non-agricultural sector in order to absorb the new entrants into the labour market in the region as a whole. Even if we assume low labour productivity growth rates of 1-2 per cent range, a rate of growth of at least 7-8 per cent in the non-agricultural sector is necessary to absorb the new entrants into the labour market. Considering that to achieve self sustained growth in the long run without being too dependent on external rents for domestic accumulation these countries need rates of labour productivity growth well above the 1-2 per cent assumed, the required growth rate for generating sufficient productive employment to meet the growing labour supply would have to be closer the 10 per cent point. A comparison of this requirement with the actual growth rates of 0.9 per cent and 1.9 per cent per annum for industrial and services sectors in the MENA region during the 1980-91 period (Table A4), brings into clear relief the problem of growing unemployment and underemployment of labour in the post oil boom era in the region. This is partly reflected in the rapid rates of increase in recorded open unemployment, specially youth unemployment in the region (see, Stevenson and Adams, 1992, Al-Qudsi, et al. 1993). The other part, and perhaps the larger part of the problem which remains unrecorded in the developing countries but is implicit in the differential rates of growth of output and labour force is the growing underemployment of labour in the regional economy. With the end of significant out migration from the region during the 1990s the problems of unemployment and underemployment of labour is likely to be exacerbated. Rather than the mobility of labour between the non-traded and the traded goods sectors, which is the central issue of adjustment within the comparative static full employment models of the Dutch Disease theory, the main problem of adjustment to the post oil economy of the MENA region thus seems to be the achievement of a sufficiently high rate of job creation and the provision of adequate training for the new entrants into the labour market to fill these jobs. This leads us to the second general stylized fact about the labour market in the MENA region, that is the quality of the labour force.

Fast rates of growth and structural change in the MENA region during the oil boom era largely brought about by the inflow of external resources has led to a situation where the quality of the labour force in terms of skills, training, and education is well below that implied by the level of income and the structure of production in these economies. As we have already observed, in terms of per capita income levels and the structure of output and employment most of the MENA region countries fall within the category of the World Bank's middle income country grouping, and many belong to the higher middle income bracket. In terms of the educational attainment of the adult population, however, the MENA region seems to lag far behind the middle income countries. As can be seen from Table A8 the rate of adult illiteracy in the MENA region is more than twice as high as the average for the middle income countries, and indeed it is even well below the average for the low income countries. This pattern is repeated for individual countries shown in the table with the exception of Turkey and Jordan.<sup>17</sup> Adult illiteracy amongst the female population is particularly high in the MENA region by any standards. The fact that such low rates of adult literacy during the 1990s were recorded after massive investment in education during the 1970s and the 1980s decades in the region,<sup>18</sup> is indicative of the historical neglect of formal education in the region and the considerable amount of resources which the educational upgrading of the population still requires. Though there also seems to exist a large room for improving the efficiency of the educational expenditure in the region as well. For instance

<sup>&</sup>lt;sup>17</sup> The case of Turkey is ambiguous. With 40 per cent of its population in the rural areas and mainly engaged in traditional agriculture one would expect a pattern similar to the case of Iran or Egypt. The Turkish statistics on adult illiteracy become even more problematic when it is considered that the average years of schooling for adult (over 25) population in 1980, according to the human development report of 1981, was 2.8 years, with 3.8 years for male and only 1.8 years for female population. The same figures for Iran in the same year were, 3.5, 4.2, and 2.8 years, and for developing countries as a whole, 3.5, 4.4, and 2.5 years.

<sup>&</sup>lt;sup>18</sup> For example, according to Al-Qudsi, et al. (1993) investment in education in the Arab countries of the region increased from \$1.8 bn in 1970 to \$28 bn in 1988.

existing studies show a considerable mismatch between the output of the formal educational system and the educational and training requirements of the economy in various MENA region countries (see, Amerah, 1990, Pissarides, 1992, Al-Qudsi, et al. 1993, and Richards and Waterbury, 1990, ch.5).

Formal education plays largely a complementary role in the process of learning and skill formation in the economy - though some may consider basic literacy and numeracy of the labour force as a minimum requirement for modern economic growth. The larger part of the necessary skills in the economy are generated within the production process through learning by doing or through on the job training by the firms. The growth of skills and know-how in the economy would therefore depend on the growth of investment in physical capital and of output as well as the existence of an appropriate incentive structure to encourage such learning and training both on the part of the employers and workers - e.g. stable employment relations, job security, and `fair' remuneration of labour. Given that the large share of the labour force in the MENA region are either engaged in traditional agriculture or are first generation migrants from the rural areas, and considering the young age structure of the labour force, the existing stock of industrial skills in these economies is likely to be relatively even lower than that suggested by the data on the rates of illiteracy amongst adult population discussed above. With the collapse of the investment process in the region during the 1980s and the trend towards growth of non-regular employment in some countries, it is likely that the stock of skills relative to the size of the labour force has been decreasing considerably in recent years.

Adjustment policy in the post oil boom economy of the MENA region, therefore, in addition to addressing the question of external balance also has to be able to cope with the problems of growing unemployment and underemployment of labour and the low stock of human capital and skills in the economy. Such an adjustment process is much more complex than a mere shift of labour between the non-traded and the traded goods sectors which can take place through a real devaluation of the exchange rate or sufficient reduction in real wages as the Dutch Disease theory would have it.<sup>19</sup> A successful adjustment policy in the context of the MENA region economies, amongst other things needs to address two basic issues. The first one relates to the improvement of the productive efficiency within the economic sectors, particularly those of industry and agriculture. Improved competitiveness resulting from efficiency gains within the traded goods sectors, specially in non-traditional manufacturing, is necessary for the resumption of growth without exacerbating the external

<sup>&</sup>lt;sup>19</sup> Despite the lack of empirical support for the Dutch Disease theories in the case of the MENA region economies still a large number of recent work on the labour markets in the region tend to use it as a starting theoretical framework. See, e.g. Anani (1990) on Jordan, Alloui and Dethier (1990) on Morocco, and Assad and Commander (1989) on Egypt. Failing to fit the facts into the straight jacket of the Dutch Disease theory, (e.g., the fact that there has been an acceleration in the growth of the share of the labour force in the services sector with the end of the oil boom), the main preoccupation of these papers has been to explain the anomalies between the theory and the empirical facts.

imbalances which have been given rise to in the post oil boom economies in the region. The second essential requirement is the resumption of investment growth in the region at a rate and with a structure which would be adequate to address the problems of growing unemployment and underemployment of labour and the inadequacies of human capital formation. The resources made available through efficiency gains, as well as possibly lower real wage and consumption levels, may help to finance the required rates of investment growth. However, depending on the level of industrial development and the existing capital stock in the economy, external finance may be needed to a higher or lesser degree to supplement domestic resources in order to achieve an adequate rate of investment in the different economies. Though labour market flexibility can play an important role in the process of structural adjustment, to rely too heavily on real wage reductions and casualization of labour can hinder this process by reducing work effort and learning, alleviating the pressure on the firms to improve efficiency, and reducing investment incentives from the demand side.

As noted in the previous section, in all the MENA region countries in Groups 2, 3 and 4, various adjustment packages have been introduced in the post oil boom era to cope with the external and internal imbalances in their economies. Because of the complexity of the adjustment processes involved, the analysis of the role of the labour markets in the adjustment process has to be undertaken in the context of specific country case studies. The case of Egypt, as a recepient of a massive amount of external resources durign the oil boom, and as a country following a state-led inward oriented industrialization strategy, epitomizes the adjustment problems facing other late adjusting countries in the MENA region, including the surplus labour oil exporting economies in country group 2. In the next section we shall therefore consider the case of Egypt, as an example of a late adjusting country in the MENA region in more detail.

#### 5. THE EXPERIENCE OF EGYPT

The inception of the 'Infitah' or the Open Door Policy in Egypt in 1974 coincided with the beginning of a period of massive inflow of external resources into the Egyptian economy following the 1970s oil boom in the MENA region. A major share of the external resources which were comprised of the Suez canal revenues, migrant workers remittances, revenues from hydrocarbon exports and from tourism, and foreign capital inflows, directly accrued to the state. According to the estimates by the World Bank (1983) the share of external resources in GDP, excluding financial capital inflows, increased from about 6 per cent of the GDP percent in the early 1970s to close to 45 per cent by the early 1980s. Oil revenues, which by the early 1980s constituted about 25 per cent of the GDP, almost totally

accrued to the central government. The developments in the Egyptian economy during the oil boom period and its aftermath were strongly shaped by government policies, either directly through the expenditure of external resources in the economy, or indirectly through its trade and industrial policies and the manner it shaped the economic institutions and the organizational setup of the economy.

The Open Door Policy initiated in 1974 led to greater integration of the Egyptian economy into the market economies of the West and in particular into the MENA region economy during the oil boom period, and was instrumental in attracting foreign capital which formed a major part of the external resource inflow into the economy during the ensuing period (Waterbury and Richards, 1990, Abdel-Khaleq, 1981). Though 'Infitah' brought about a partial liberalization of the Egyptian economy, the government continued to play a dominant role in the economy throughout the 1970s and the 1980s. The import substitution industrialization strategy which had characterized Egyptian industrialization since the interwar period continued, with the public sector enterprises playing a major role in industrial production. While the encouragement of the private sector during the 'Infitah' period led to a boom in private sector investment and in particular in investment in joint ventures between government and foreign and domestic partners under the generous terms of the Law 43 of 1974, the public sector nevertheless maintained its dominant position in the non-agricultural sectors of the economy. By the late 1980s the size of the public sector in Egypt was still one of the largest amongst the developing market economies in terms of the share of output, employment, value of fixed assets and gross investment.<sup>20</sup> In addition to its direct involvement in production activities, the government also intervened in the economy through various price controls and quantitative restrictions.

As in other MENA region economies the reaction of the Egyptian government during the oil boom period was to overhaul the massive inflow of the new external resources in the domestic economy by starting ambitious new investment projects in the public sector and generating a private sector investment boom through generous provision of credits and other subsidies. The share of investment in GDP increased from about 13 per cent in 1973 to 32 per cent in 1979. During the first three years of the boom, namely the 1973-75 period, the rate of growth of domestic investment was close to 50 per cent per annum. Such massive increases in the rate of investment, in addition to creating various bottlenecks and inefficiencies in the economy, also posed serious problems in terms of the long term sustainability of the growth process given the windfall character of the new external

<sup>&</sup>lt;sup>20</sup> It is estimated that by the late 1980s about half of the GDP and two thirds of non-agricultural GDP was produced in the public sector. The share of public sector enterprises in manufacturing production was more than 60 per cent, and the public sector inclusive of public enterprises employed close to 70 per cent of the wage labour in the urban sector. The share of the public sector in gross investment in manufacturing and mining during the first five year plan period (1983-87) and the second five year plan period (1988-92) was 62 per cent and over 50 per cent respectively. See, Dessouki (1991) and World Bank (1993b).

resources. In fact, the rate of increase in the overall government expenditure over the boom period by far exceeded the growth of new external funds accruing to the government, or any rate of increase which could be plausibly sustained by the availability of such funds.<sup>21</sup> This was reflected in the emergence of a large and widening, and clearly unsustainable, government budget deficit over the period. The budget deficit which stood at about 10 per cent of the GDP in 1973 increased to over 25 per cent by the end of the 1970s decade, well before the decline in the windfall gains of the oil boom had set in (Table E3).

A parallel outcome was the widening foreign exchange gap and increasing resort to foreign borrowing to finance domestic investment. Egypt's foreign debt which stood at about 2 billion US dollars in the early 1970s rapidly climbed to over 20 billion dollars in the early 1980s and more than 40 billion dollars by the mid 1980s. The debt service ratio increased from about 20 per cent of the value of exports in the early 1980s to about 70 per cent by the mid 1980s. The effect of the mounting debt service obligations was compounded by the declining export real values, mainly resulting from the adverse movement of the external terms of trade, during the 1980s.<sup>22</sup> With the collapse of oil prices in 1985/86 and the drying up of the sources of foreign borrowing and aid the economy was plunged into a recession led by significant cuts in government investment. The recession has been further prolonged and deepened by the deflationary impact of the adjustment policies pursued by the government since 1987.

The growth performance of the Egyptian economy during the 1970-90 period is depicted in Table E1. As can be seen the 1970-85 period constituted a period of relatively high rates of economic growth, with an overall rate of growth of GDP of about 8 per cent per annum, and with substantial structural changes in the economy. One feature of the growth performance during this period which immediately stands out is the much faster rate of growth of investment as compared to the GDP growth. During the 1970s gross investment grew at almost 5 percentage points above the rate of growth of the GDP. The persistence of this phenomenon over such a long period of time is one indication of the inefficiency of resource use in the Egyptian economy over the boom period, which is also reflected in the lack of competitiveness of the industrial sector and the sluggish growth of industrial exports. Lack of productive efficiency is a much more plausible explanation of the growing structural imbalances in the Egyptian economy over the boom period than the crowding out of the

<sup>&</sup>lt;sup>21</sup> Government revenue increased from 29 per cent of the GDP in 1974 to 42 per cent in 1982, largely as a result of the increase in the new external funds related to the oil boom in the region. The share of the revenues from the Suez Canal and oil revenues in total government revenue increased from 5 per cent in 1974 to over 30 per cent in 1982. The share of government expenditure in GDP on the other hand increased from 49 per cent to 62 per cent over the 1974-82 period (Handoussa, 1991a).

The external terms of trade declined by more than 40 per cent between 1981 and 1986, and by a further 20 per cent by 1990 (Table E2). According to Handoussa (1991a), the loss of income due to the adverse terms of trade movement in the latter half of the 1980s was equivalent to 11 per cent of the GDP.

traded goods sectors by the non-traded goods sectors as suggested in the Dutch Disease theory. Though the investment boom led to fast growth of investment, employment and output in the non-traded goods sectors such as construction and services, this was in no way at the expense of investment in the traded goods sectors. In fact the rate of growth of investment in the traded goods sectors accelerated during the boom period, with the share of the public sector investment in the traded goods sectors being maintained and share of the private sector investment following an upward trend (Assaad and Commander, 1989).

The rate of growth of investment in the manufacturing sector during the 1974-78 period was on average above 40 per cent at current values, with its share in total investment averaging above 25 per cent with an upward trend. It was actually in the post boom period in the 1980s that along with the collapse of the overall investment process the rate of investment in the manufacturing sector plummeted with its share in total investment declining from 23 per cent in 1982 to below 20 per cent by the end of the decade (see, Handoussa, 1991b, table 27, p.96). Given the dominance of the public sector in industrial investment, the behaviour of the investment share throughout this period was dictated by government policy on direct allocation of investment funds between the different sectors. As to the private sector manufacturing investment, generous credit provisions, a protected home market, and various other generous input subsidies by the government maintained the level of profitability and investment throughout the boom period and after (Assaad and Commander, 1989, Handoussa, 1991b). Labour shortages which according to the full employment, static technology models of Dutch Disease is expected to lead to a squeeze on profitability of investment in traded goods sectors were dealt with by increased labour productivity through the introduction of modern capital intensive imported technology. This was made possible by the availability of windfall foreign exchange resources during the boom period - and was encouraged through various price incentives such as the provision of subsidized credits at negative real interest rates, an overvalued exchange rate which subsidized the price of capital intensive imported technology, and rising real wages. In fact as we shall observe in the next section, the problem facing the formal manufacturing sector during the boom period rather than being one of general labour shortages, was how to absorb the fast increases in the labour supply, and particularly its more educated segments, in the urban areas.

As to the impact of the boom on the agricultural sector, according to the Dutch Disease theory one would expect a double squeeze through 'the resource movement effect' as well as the expenditure effect. The resource movement effect in this case took place through large scale migration of the Egyptian male agricultural labour force to the labour shortage

economies in the MENA region during the oil boom.<sup>23</sup> The result was indeed a rapid rate of growth of agricultural wages. As can be seen from Table E2 and Figure E1, real wages in the agricultural sector rose at an annual average rate of 9 per cent between 1973 and 1985, from which date onwards they followed a declining trend as a result of the slow down of outmigration to the oil surplus MENA region economies.<sup>24</sup> Despite this labour squeeze from the agricultural sector, however, as in the case of the manufacturing sector the performance of agriculture does not seem to have been adversely affected during the boom period as compared to historical trends. Output, yields, and productivity of labour in the agricultural sector continued their slow upward trends during the boom period and, if anything, as compared to the pre-boom period they exhibited higher trend growth rates.<sup>25</sup> In contrast to the case of the manufacturing sector, however, this was not made possible through increased capital intensity of agricultural production. As argued by Richards (1991), despite the rapid growth of mechanization of Egyptian agriculture during the boom period, the use of new mechanized technology during this period was not labour saving. The main explanation for this phenomenon has to be sought in the institutional set up of the Egyptian agriculture, namely the utilization of surplus labour within the family farming units -- e.g., through the use of female labour and greater work exertion by the remaining male workers.<sup>26</sup>

While there may be a case for arguing that the allocation of a greater share of government investment funds to the agricultural sector would have been desirable, the unsatisfactory performance of the manufacturing sector surely had more to do with the productive inefficiency of investment projects rather than inadequate investment. And given the lack of productive efficiency of investments, it is doubtful whether a greater allocation to the agricultural sector would have improved its performance appreciably. The various sources of inefficiency in the Egyptian industry and agriculture have been extensively discussed in the literature (see, e.g., Dessouki, 1991, Handoussa, 1988, 1991b, Hansen, 1991, Hansen and Radwan, 1982, Richards, 1991, and World Bank , 1983, 1987, 1993). The inward oriented industrialization strategy and lack of exposure to competitive pressures in the domestic market or through exports is often referred to as the main underlying cause of inefficiency and lack of technological dynamism in the industrial sector as a whole. Public

According to Richards (1991), by 1984 about 12.5 per cent of the farm labour force had migrated abroad. To this must be added a large number of agricultural labourers who moved to other sectors of the economy, and particularly to non-farm rural activities during the boom years. This latter type of movement of labour is of course due to the expenditure effect of the resource boom according to Dutch Disease theory.

Richards (1991, 1994) presents a strong case on the correlation between the flow of labour migration abroad and the change in agricultural real wages.

According to the FAO data, agricultural output, labour productivity, and cereal yields had respectively an annual average rate of growth of 1.9, 0.9, and 1.4 per cent during the 1964-74 period, while during the 1974-82 period these growth rates increased to 3.0, 1.5, and 1.7 per cent respectively.

<sup>&</sup>lt;sup>26</sup> This phenomenon is also observed in studies of the impact of the oil boom in other oil exporting countries, where the adverse effects of the boom have been mainly confined to the commercial farms with predominant use of wage labour, with production in family farming units continuing their normal trends (see, Scherr, 1985 and Madjd, 1992).

sector enterprises were in addition subject to various bureaucratic controls and strict regulation by the government in their pricing, employment and wage setting, with little managerial autonomy and regard for commercial profitability.<sup>27</sup> For example, the guaranteed employment policy of the government during the 1970s had created substantial overstaffing in public enterprises at lower skill levels, while at the higher skill and managerial levels public enterprises suffered from shortages because of strict wage and salary controls imposed on them by the government which made them unattractive as compared to the private sector. Even in the case of enterprises with managerial autonomy and subject to commercial profitability norms, such as the private sector enterprises, economic efficiency was undermined by the substantial price distortions which had developed in the Egyptian economy over this period.<sup>28</sup> Selective price controls of agricultural products, and lack of attention to basic investments in land preservation is also argued to have undermined efficient resource utilization in the agricultural sector as well (Richards, 1991).

The availability of external resources made it possible to maintain high growth rates during the oil boom period and after, despite the prevailing economic inefficiencies and growing external and internal imbalances in the economy. However, with the collapse of oil prices and substantial deterioration of the external terms of trade in the latter half of the 1980s, at a time when the country's external debt had reached unsustainable levels, economic growth came to a halt. Gross investment declined by close to 6 per cent per annum during the 1985-90 period with substantial import contraction and declining per capita consumption (Table E1). During this period the foreign exchange crisis and mounting debt service arrears forced the government to embark upon the long delayed reforms which were needed to reinstate external and internal balance in the economy. The first set of major reforms were introduced in 1987 under the stand-by arrangement with the IMF which led to the rescheduling of debt service payments and temporary alleviation of the foreign exchange This, however, did not last long and by 1990 the debt service arrears had once again crisis. accumulated to over \$11 billion. A more comprehensive stabilization and structural adjustment programme began in 1991 under agreements signed with the World Bank and the IMF. The impact of the these adjustment programmes on the Egyptian economy has been far

<sup>&</sup>lt;sup>27</sup> According to Hansen and Radwan (1982, p.209) the inefficiencies of public enterprises rather than being related to public ownership *per se*, were more due to 'regulations imposed upon the enterprise by the government for macroeconomic purposes, budgetary expediency, political and bureaucratic interference with daily management, and continuously changing organizational and legal prescriptions for management'.

For example petroleum product prices averaged only about 20 per cent of world prices in the early 1980s, and by the late 1980s they still averaged about 30 per cent of world prices. The degree of various price distortions can be judged by the enormous implicit and explicit subsidies that the government provided. For example, according to the World Bank (1993) estimates the implicit subsidy on energy products in 1991 added up to 9.6 per cent of the GDP. Direct production subsidies to various public manufacturing enterprises increased from  $\pounds E 0.3$  mn in 1974 to their peak level of  $\pounds E 339$  in 1984 which was more than 10 per cent of government budget deficit in that year. For a detailed discussion of various price controls and implicit subsidies provided by the government in relation to the manufacturing sector see, Handoussa (1991).

reaching.<sup>29</sup> There has been a large scale dismantling of price controls by the government with drastic reductions in consumer and producer subsidies. Public sector enterprises have been given managerial and financial autonomy including the power to restructure the assets and activities of the enterprise, with a large scale privatization programme under way. The exchange rate has been unified and a flexible exchange rate policy has been adopted. Liberalization of the interest rates combined with restrictive credit policies have turned the negative real interest rates which prevailed during the 1970s and the 1980s into highly positive rates. Quantitative import restrictions have been largely dismantled and the range of tariffs have been reduced.<sup>30</sup>

The drastic curtailment of government investment during the reform period, combined with the improved revenue position of the government resulting from subsidy reductions and increased tax rates has led to a considerable reduction of the budget deficit. The overall public sector deficit declined from averaging 20 per cent of GDP during the 1980s to close to 5 per cent of GDP in 1992. The current account of the balance of payments has improved, registering a net positive balance in 1992, mainly as a result of the improvement in services balance and net current transfers, while the trade account gap has continued to widen. The overall impact of the adjustment programme in the short run has been highly deflationary, with gross investment and private savings continuing their rapidly declining trends since the mid 1980s and per capita consumption falling. The key questions facing the Egyptian reform programme in the medium and long term are whether it would generate adequate efficiency gains and improved competitiveness within the existing productive activities in order to generate a satisfactory foreign trade performance, and whether it could revive domestic investment and private savings in order to resume the growth of output and employment in the economy.

#### The Labour Market During Boom and Recession in Egypt

As in other MENA economies fast rate of growth of labour force has been a dominant feature of the Egyptian labour market over the past two decades. Given that there have been varied estimates on the number of the labourers migrating to labour shortage Arab countries during the 1970s and the 1980s, and depending on the data sources used, different estimates of the growth of labour force ranging between 2.5 to 3.0 per cent a year have been mentioned in the literature (see, e.g., Handoussa, 1991a, Fergany, 1991, Assaad and Commander 1989). Even with the omission of migrant labourers the rate of growth of the

<sup>&</sup>lt;sup>29</sup> For more detailed discussion of the adjustment programmes and their impact see, Korayem (1993) and World Bank (1993b).

<sup>&</sup>lt;sup>30</sup> For a comprehensive review of foreign trade policies in Egypt see, GATT (1993).

domestic labour force has been well over 2 per cent per annum over the past two decades.<sup>31</sup> This has posed a major challenge in terms of employment generation for the Egyptian economy, which with the reversal of the labour migration flows since the early 1990s has become even more stringent.

Given that in the early 1970s, at the outset of the economic boom, close to 50 per cent of the labour force was engaged in the agricultural sector with immense population pressure on land, the main burden of employment creation had to carried by the non-agricultural sectors. As it happened during the 1973-84 period the share of employment in agriculture declined from 59.5 per cent to 36.5 per cent, with an absolute decline in agricultural employment of more than 11 per cent.<sup>32</sup> This shift of labour which is in accordance with the normal patterns of development, in the case of Egypt was somewhat intensified as a result of the economic boom which involved a rapid growth of employment in construction and non-agricultural rural sector employment as well as high rates of migration of agricultural labour to other MENA region countries. Despite the reversal of the foreign migration flows and the economic recession since the mid-1980s, it is unlikely that these trends would be reversed.<sup>33</sup> At best, these trends could be expected to become somewhat moderated, with agriculture acting as a shock absorber in accommodating the surplus labour in the economy.

The rate of growth of the labour force in the non-agricultural sector during the 1973-84 period was more than 4.7 per cent a year. During the boom period and up to the early 1980s the growth of non-agricultural employment was adequate to absorb such high rates of new additions to the labour force without generating any major unemployment problems. The construction and manufacturing sectors contributed an equal share in labour absorption by each employing 15 per cent of the new additions to the labour force during the 1973-82 period.<sup>34</sup> The highest share, namely 53 per cent, was absorbed by the services sector, of which the major contribution came from government employment. Total public sector contribution to labour absorption in this period was as high as 71 per cent, with government

According to the Labour Force Sample Survey results reported in Assaad and Commander (1989) the rate of growth of domestic labour force between 1973 and 1984 was 2.27 per cent a year, and Population Census results of 1976 and 1986 reported in Fergany (1991) indicate an annual growth of 2.2 per cent. For a discussion of different data sources and their comparability see, Fergany (1991) and Handoussa (1991a).

<sup>&</sup>lt;sup>32</sup> These estimates are based on Labour Force Sample Survey results reported in Commander and Assaad (1989).

<sup>&</sup>lt;sup>33</sup> It should be noted that despite these trends Egypt has one of the highest agricultural population land ratios in the world, and that population pressure on land has dramatically increased since the 1960s. According the FAO statistics this ratio for Egypt increased from 596 persons per hectare in 1961 to 821 persons per hectare in 1990, which is even higher than the ratio for highly populated countries in the Far East such as China, Indonesia and India. Of course, with a 100 per cent irrigation and high use of fertilizers, the carrying capacity of land in Egypt is also higher than most other developing countries. For a more detailed comparison of agricultural input use in Egypt with other developing countries see, Karshenas (1992, pp.37-40).

<sup>&</sup>lt;sup>34</sup> The employment data discussed in this paragraph is based on Labour Force Sample Survey results reported in Assaad and Commander.

contributing 55 per cent and public sector enterprises, including manufacturing, contributing 16 per cent. The contribution of the private formal sector (above 10 employees) in this period was no more than 4 per cent.

The high rate of labour absorption in the public sector was the outcome of the government's guaranteed employment policy which was a remnant of the 'Arab Socialism' days of the 1960s. In following its guaranteed employment policy during the 1970s the government seems to have acted as a residual employer in the non-agriculutral labour market, mopping up the fast increasing new additions to the urban labour market rather than competing away labour from other sectors in a tight labour market. It is significant to note in this regard that during the boom period and after, real wages of government employees followed a declining trend (Figure E1). Even in public sector enterprises basic real wages did not grow by more than 1.6 per cent a year between 1973 and 1982 when they peaked. The Egyptian government, therefore, seems to have opted for a maximum employment policy, or in essence a corporatist work sharing strategy, at the expense of real wage growth even during the boom period. This seems to have had the effect of moderating wage demands in the organized private sector in the urban areas as well. As shown in Table E2 and Figure E1, the growth of basic real wages in the organized private sector between 1973 and 1985 when they peaked, was no more than 2.4 per cent a year. This is indeed a moderate growth rate for an economy subject to a massive inflow of external resources and with GDP growth rates of over 8 per cent a year. As compared to the real wage explosion in the informal activities in the rural areas and the agricultural sector, or even the real wage increases in the construction sector in the urban areas, the wage increases in the urban formal sector remained moderate.<sup>35</sup> The existing evidence, therefore, seems to suggest that public sector employment, rather than competing away labour from the traded goods sectors or the private sector during the boom period, acted more as a residual absorber of excess labour. And instead of exerting undue pressure on urban real wages, government wage and employment policy may have had the opposite effect of moderating wage demands in the organized private sector.

The picture that emerges from the evidence on wage trends and employment changes during the boom period is indicative of a high degree of labour market segmentation between informal rural activities including agricultural wage labour, and the formal sector in the urban areas. As noted in the previous section, high rates of outmigration of agricultural labour to other countries, combined with the boom in rural informal sector associated with

<sup>&</sup>lt;sup>35</sup> It should be noted that the wages and salaries shown in Table E2 and Figure E4 refer to basic wages and do not give an accurate picture of total renumeration of labour (see, Zaytoun, 1991). The data provided by the UNIDO on manufacturing wages in the formal sector which incorporate total remunaration of labour indicate a real wage growth of more than 4.5 per cent per annume between 1973 and 1984 when they started a downward trend. Even this higher growth rate, however, is much less than growth of real wages in agriculture and appears not very high in a booming economy growing at more than 8 per cent a year.

the inflow of remittances, led to a rapid growth of real wages in the rural areas over the 1973-85 period. In the organized or formal sector on the other hand real wage increases were kept moderate in order to maximize the absorption of new additions to the labour market, particularly amongst the high school and univiersity graduates. During the boom period there was thus a considerable narrowing down in the wage differentials not only between different sectors, but also between different occupations within the sectors, particularly those of the manual and non-manual workers.<sup>36</sup>

This picture is far from that depicted by the Dutch Disease theory where within a tight labour market, government employment and employment in other non-traded goods sectors lead to increased labour costs and a squeeze of profitability and growth in the traded goods sectors. In fact, as shown in Figure E2, one can observe a clear acceleration in the rate of growth of manufacturing value added in the formal sector from the beginning of the boom in 1973, even more pronounced than that observed in the case of agriculture discussed in the previous section.<sup>37</sup> Despite the capital intensity of industrial investments during the boom, the rate of growth of employment in the formal manufacturing sector appears to have kept pace with output up to the early 1970s, largely as a result of the guaranteed employment policy by the government which created substantial overmanning in public enterprises and added to the production inefficiencies in the sector. Such productive inefficiencies which are reflected in high unit labour costs and other unit input costs, reduce international competitiveness and are often reflected in an overvalued exchange rate from the point of view of the industrial sector. This type of overvaluation of the exchange rate, however, is far from the type of overvaluation which according to the Dutch Disease theory is brought about by high real wages resulting from an overexpansion of the non-traded goods sectors relative to the traded goods sectors.<sup>38</sup>

From the early 1980s, due to rising budget deficits, the government in practice had to abandon its guaranteed employment policy. The slow down in the growth of government employment has since led to a rapid increase in unemployment amongst the high school and university graduates and mounting waiting lists on the guaranteed employment scheme. Simultaneously, the rate of decline in basic real wages in the government sector has shown a rapid acceleration since 1982. By 1987 basic real wages in the government sector had

<sup>&</sup>lt;sup>36</sup> On the narrowing of wage differentials and the role of government policy in that see, Zaytoun (1991).

<sup>&</sup>lt;sup>37</sup> It is paradoxical that a number of authors, having in mind a strong version of the the Dutch Disease theory which predicts an actual contraction of the traded goods sectors, still maintain that the economic boom in Egypt led to a contraction of the traded goods sectors. See, e.g., Handoussa (1991a), Assaad and Commander (1989), Pissarides (1992), and Shaban, et.al, (1993).

<sup>38</sup> This is also reflected in the movement of internal terms of trade between the traded and non-traded goods sectors during the boom. As shown in Table E2, during the 1973-82 period the implicit deflators of agriculture and industry relative to the GDP deflator increased by close to 30 per cent each. The growing lack of competitiveness of the traded goods sectors, therefore, seem to have more to do with productive inefficiencies within the sectors rather than adverse relative price movements.

declined to almost half of their 1973 pre-boom levels. While overmanning still remains a main problem in government services, low wages have given rise to a demoralized and inefficient civil service (Assaad and Commander, 1989). Similarly the growth of employment in public enterprises during the 1980s also slowed down substantially. This is partly reflected in the slow down in employment growth in organized manufacturing sector during the 1980s as shown in Figure E2. The slow down in employment absorption in the manufacturing sector from the early 1980s was partly the result of the sharp decline in the rate of manufacturing investment discussed in the previous section, and partly the result of the greater flexibility introduced in the employment and wage setting practices of public enterprises from the late 1970s.<sup>39</sup> The end of the boom also brought about a rapid rate of increase in unemployment and underemployment of labour in the construction sector. The growing flow of return migration from the mid-1980s and the end of the boom in the rural non-agricultural sector, has led to a fast rate of increase in unemployment and underemployment of labour in the rural areas as well.

The outcome of these parallel processes has been a rapid increase in unemployment and underemployment of labour since the early 1980s. The rate of open unemployment, according to the 1986 population census was 14.7 per cent of the labour force, which is almost double the rate of 7.7 per cent recorded in 1976. Estimates of open unemployment based on the Labour Force Sample Surveys indicate a rising trend since the mid 1980s. According to estimates by Fergany (1993), inclusive of long-term 'discouraged' unemployed, the rate of unemployment at the end of 1992 was close to 17.5 per cent. Unemployment is largely concentrated amongst the youth with intermediate and university certificates and with no prior work experience. Less than a third of the unemployed are those with prior work experience, of whom more than two thirds are either without elementary certificates or are illiterate.<sup>40</sup> To these figures one should add a significant amount of underemployment of labour, either taking the form of overmanning in government services or work sharing and low productivity in the informal sector.

Despite the apparent concentration of the unemployed amongst the young educated groups, it would be misleading to portray the Egyptian unemployment problem as one of primarily a mismatch in the supply and demand for labour, or indeed a problem of

<sup>&</sup>lt;sup>39</sup> The Law 48 of 1978 allowed greater managerial flexibility in wage and employment policies in the public enterprise sector. See, Zaytoun (1991).

<sup>&</sup>lt;sup>40</sup> According to the 1986 Population Census results reported in Handoussa (1991a), more than 76 per cent of the unemployed consisted of new entrants to the labour force, of whom more than 90 per cent were holders of higher education degrees which made them eligible for the government's guaranteed employment scheme. About 24 per cent of the unemployed held previous jobs, 96 per cent of whom were male. More than 50 per cent of this group is illiterate and 22 per cent without an elementary school certificate. 75 per cent of the unemployed were under 25 years old. Female unemployment rate, at 24.2 per cent, was more than double the male unemployment rate which was 10.4 per cent. Rural unemployment rate, though lower than the urban rate has been growing much faster than the latter, so that by the 1992 the gap between the two has been significantly closed (Fergany, 1993).

inflexibility in the labour market per se. Firstly it should be noted that, as shown for example in the case of construction workers in Assaad (1991), unemployment amongst the lesser educated segments of the labour force in the informal sector mainly takes the form of work sharing and underutilization of labour rather than open unemployment. The unemployment problem seems therefore a more general phenomenon than the statistics on open unemployment suggest. Surely there is a need for the restructuring of the educational system towards more widespread basic education and vocational training. As observed in Section 4 above, Egypt has one of the highest rates of illiteracy in the MENA region, and as noted in Handoussa (1991) the majority of the Egyptian industrial labour force is still lacking in basic education and suffers from inadequate vocational training. A greater expenditure on basic education and on vocational training is certainly required to improve the adaptability of the labour force as an important part of the structural adjustment programme which is currently under way. Such restructuring of the educational system, however, is not in itself sufficient to reduce the mounting unemployment problem, particularly amongst the youth, in the Egyptian economy. Nor is the problem of general unemployment in the Egyptian economy due to lack of wage flexibility in the labour market. As observed above, the Egyptian economy, both in the public sector and in the private sector, has shown a high degree of real wage flexibility over the boom and recession. It should be noted that it is not the high levels of remuneration of labour in the government services that has led to the high rates of open unemployment amongst the educated youth on the government's guaranteed employment register. If anything, higher real wages and salaries, and of course a leaner government sector, are required in order to create an efficient civil service and ensure adequate remuneration of civil servants. The congregation of the educated unemployed youth on the government's guaranteed employment waiting list is above all an indication of lack of opportunities for productive and stable employment in the rest of the economy.

The resumption of investment and output growth seems therefore to be an essential prerequisite for reversing the growing unemployment trends in the Egyptian economy. However, there are a number of reasons to believe that even the achievement of investment growth rates as high as those observed during the oil boom period may not be adequate to provide sufficient productive employment for the fast increasing Egyptian labour force. To begin with, the foreign migration outlet which reduced the rate of growth domestic of labour force from about 2.8 per cent a year to close to 2 per cent a year, is no longer available. Even in the unlikely event of another oil boom in the region on a similar scale as the 1970s oil boom, political considerations rule out the acceptance of a large scale inflow of labour from the Arab countries by the labour shortage economies in the region. Secondly, the substantial inflow of migrant labour remittances which during the 1970s and the 1980s led to substantial labour absorption in booming informal activities particularly in the rural areas, is no longer available.
went hand in hand with declining real wages is no longer possible. Furthermore, in addition to the high rates of flow of new additions to labour supply, the Egyptian economy at present also needs to cope with the substantial stock of unemployed and underemployed labour which has been accumulating since the early 1980s. All this is indicative of the fact that in addition to achieving a high enough rate of investment growth, in order to cope with its mounting unemployment problems, the Egyptian economy also needs to undergo fundamental structural changes towards greater labour intensity of productive activities. The bold structural adjustment package which is being implemented since the early 1990s is expected to bring about such structural changes through greater export orientation of the economy and the reform of relative prices in the factor and product markets. Whether this policy package is adequate to the task remains to be seen. The lessons from Turkey and Morocco with a longer experience of similar adjustment policies could be of value to Egypt and to other later adjusters in the MENA region in this respect.

#### 6. THE EXPERIENCE OF TURKEY

The adjustment policies adopted by Turkey during the 1980s decade implied a break with the past policies and a radical change in the country's industrialization strategy. Receiving nine structural adjustment loans over the 1980s decade, Turkey is one of the World Bank's 'early intensive adjustment lending' countries, and is often cited for its considerable success in economic restructuring in particular in achieving reasonable growth rates during the adjustment process (World Bank, 1988a, 1990). The experience of Turkey is, therefore, expected to have important lessons on the interactions between the adjustment process and the structure and functioning of the labour markets.

Up to the end of the 1970s decade Turkey had followed a strong inward looking industrialization strategy with a prominent role assumed by the government - both as a coordinator of the activities of the private sector, and through its direct investment in the economy and its control over the state economic enterprises. During this period the Turkish economy achieved high growth rates and a considerable diversification of its industrial base. During the First and the Second Plan periods, i.e., the 1963-72 period, GDP grew at above 6.7 per cent a year, with a largely single digit inflation rate averaging below 10 per cent. The share of manufacturing in GDP increased from about 13 per cent to about 19 per cent during the same period.<sup>41</sup> However, as in almost all other countries in the MENA region following an inward looking industrialization strategy, this type of growth over time created an economic structure with recurring foreign exchange bottlenecks, as it discouraged exports

For detailed discussions of the industrialization experience of Turkey during this period see, Celasun (1983, 1991), Krueger (1974), Krueger and Tuncer (1982), and Hansen (1991).

and created a growing dependence on intermediate and capital goods imports. The weaknesses of this pattern of growth particularly came to the fore during the 1970s and the early 1980s decades when the economy faced serious adverse external shocks. The severe debt crisis which hit the Turkish economy by the end of the 1970s decade, however, had as much to do with macroeconomic policy as with external shocks and structural rigidities in the economy.

Foreign exchange shortages had already forced the Turkish government to adopt an IMF supported stabilization programme in 1970. This was accompanied by a large devaluation of the Turkish lira, as a tool of short-run economic stabilization as well as an early attempt to boost the export orientation of the domestic industry. The stabilization programme, combined with the boom in the world economy during the early 1970s which boosted the country's foreign exchange earnings both through the increase in migrant labour remittances and booming commodity exports, did in fact lead to a substantial improvement in the balance of payments during the 1970-73 period. The longer term aims of restructuring the economy towards greater outward orientation and export expansion however were not pursued seriously in this period. Despite the sharp deterioration in Turkey's external terms of trade during the first oil shock of the early 1970s, the government followed an expansionary policy by increasingly relying on foreign borrowing to cover the rapidly deteriorating balance of payments situation. Investment in both the public and the private sectors accelerated during the 1973-78 period, and the industrial sector expanded rapidly, relying on the booming domestic demand. The trend growth rates of investment and the GDP during this period were even higher than those of the first and the second plan period of 1963-72 (Table T1).

This foreign financed economic boom, which was accompanied by rising employment and wages in the non-agricultural sector, a gradual revaluation of the real exchange rate, and growing indebtedness of the country, however, did not turn out to be sustainable. By Mid-1977, with foreign creditors losing confidence in the economy, the country faced a severe debt crisis which led to drastic stabilization measures adopted following the 1978 IMF accord. While the government during the 1978-79 period did not manage to restrain its current expenditure, the large devaluation of lira and severe import compression measures created strong stagflationary processes in the economy. Output and investment declined sharply in this period, while price increases assumed hyper inflation proportions<sup>42</sup>. Increased quantitative restrictions at a time of high inflation intensified the price distortions in the economy. These problems were clearly magnified by the second oil

As shown in Table T1, gross fixed investment declined by 9.9 per cent in 1978, 3.6 per cent in 1979 and 10 per cent in 1980. Per capita GDP fell by more than 2.5 per cent a year in 1979 and 1980, while manufacturing output declined by 5.2 and 6.3 per cent in the same period. Inflation (CPI) accelerated from 17 per cent in 1976, to 45 per cent in 1978 and 110 per cent in 1980 (Table T2).

shock of 1979-80, which forced the government to embark upon a radical stabilization and restructuring programme.

The 1980s reforms constituted a vigorous attempt at restructuring the economy towards greater market orientation and export expansion. There is an extensive body of literature on the stabilization and adjustment policies in Turkey during the 1980s decade<sup>43</sup>. The adjustment policies during this period consisted of a package of orthodox policies which were put into effect with particular boldness. These consisted of fiscal and monetary restraint, gradual deregulation of the product and financial markets, trade liberalization, flexible exchange rate policy following a large devaluation in 1980, and generous export Market deregulation and relative price changes formed an important component subsidies. of adjustment policy in this period. The nominal exchange rate was devalued by about 145 per cent in 1980 followed by on average 40 per cent devaluation each year in the subsequent This, in terms of the real effective exchange rate, constituted a 30 per cent period. devaluation in 1980 followed by another 25 per cent devaluation between 1980 and 1987. Removal of import quotas and the gradual liberalization of imports was combined with generous export subsidies in order to correct the anti export bias of the earlier periods. Direct subsidies to manufactured exports ranged from 20 to 35 per cent in different years during the 1980s (Celasun, 1991 and Uygur, 1991). Various price controls in the product markets were removed and the state enterprises were instructed to set prices to cover costs.44 Interest rates in the formal credit markets which in 1980 recorded real rates of -80 per cent and below, were raised substantially, so that by 1982 positive real interest rates of 10 to 20 per cent were attained. These relative price changes were taking place against the backdrop of rapidly declining real wages during the 1980s (see, Table T2).

As noted in the previous section the growth performance of the Turkish economy during the post-reform period, despite being lower than historical trends in Turkey, has ranked amongst the highest in the MENA region countries. As shown in Table A4, the average annual rate of growth of the GDP over the 1977-90 period was close to 4 per cent, with the industrial and manufacturing sectors achieving annual growth rates of 4.2 per cent and 4.7 per cent per annum respectively during the same period. With the investment growth rate of 3.2 per cent per annum during the 1980s decade, as the World Bank (1988a) points out, Turkey was 'one of the few countries that attained structural adjustment without a decline in investment'. At the same time, the rate of inflation declined from 102 per cent in 1980 to 28 per cent in 1982. What particularly stands out in the growth performance of the

<sup>&</sup>lt;sup>43</sup> See, e.g., Kopitz (1987), Aricanli and Rodrik (1990), Celasun and Rodrik (1989), Boratav (1986), Boratav and Turel (1993), and Rodrik (1990).

<sup>&</sup>lt;sup>44</sup> Price increases ranging from 45 per cent for gasoline to 300 hundred per cent for paper and 400 per cent for fertilisers were recorded during a period when the average inflation rate was about 70 per cent (Celasun and Rodrik, 1989).

Turkish economy during this period, however, is the rapid rate of growth and the considerable diversification of exports, during a period of slow growth of world trade. Exports grew by about 20 per cent per annum during the 1980s decade and the share of manufactured exports in total increased from about 12 per cent in 1971 to 37 per cent in 1981 and about 68 per cent in 1990.

In assessing the performance of the Turkish economy during the 1980s, and in particular comparing this performance with those of other countries inu the MENA region, a number of points have to be taken into consideration. Firstly, Turkey received a considerable amount of concessionary loans from the IMF, the World Bank and other multilateral agencies, not paralleled in any other country during the 1980s. The country's foreign debt which stood at about \$11 billion during the foreign exchange crisis of 1977 had climbed to \$49 billion by 1990. Secondly, there was a considerable improvement in the international terms of trade of Turkey during this period, in contrast to many other MENA region countries. The international terms of trade for Turkey deteriorated by more than 37 per cent during the 1970-80 period, but from 1980 onwards there was a continuous improvement in the terms of trade with a 15 per cent increase in favour of Turkey by 1989 (Table T2). In addition, the spectacular export performance of Turkey seems to have been to a noticeable extent influenced by fortuitous conditions in the region, e.g., the Iran-Iraq war (see, Celasun and Rodrik, 1989). This is reflected in the phenomenal growth rates of 85 per cent and 40 per cent for exports in 1981 and 1982 respectively, with a return to more normal patterns by the historical standards of the 1970s, as shown in Table T1. Nevertheless, the economic reforms of the 1980s, particularly measures taken towards manufacturing export promotion, have been an important precondition for being able to take advantage of these favourable factors.

Despite the relatively successful performance of the Turkish economy during the 1980s, a number of important problems have yet to be resolved. Firstly, the outstanding performance of manufacturing exports has so far relied on fuller utilization of the existing capacities, and manufacturing investment throughout the 1980s decade has remained stagnant. Much of the growth of investment in Turkey during this period has been concentrated in services, infrastructure, and housing. In addition, considering that the 1980s decade was a period when in contrast to the 1970s the external terms of trade had a considerable improvement in favour of the country, and that during this period the foreign debt climbed by more than four folds, the overall rate of growth of investment of 3.2 per cent per annum does not compare favourably with the historical trends. The available econometric studies indicate that financial liberalization and the high interest rate policy during the adjustment period has not encouraged domestic savings and in addition has had a significant negative impact on domestic investment (Uygur, 1993).

Secondly, the high interest rates and relatively high budget deficits since the mid-1980s have been a source of instability and growing inflationary pressures in the economy. Since the early 1980s government revenues as a share of the GDP have declined partly as a result of the reform of the taxation system and partly due to the high rates of inflation causing government revenue lagging behind the growth of nominal GDP (Boratav et al. 1993). During the 1979-88 period government current expenditure also declined largely due to public sector pay and employment restraint and public enterprise price increases - though the effect of these factors was to a large extent neutralized because of the rapid increase in interest payments on government debt, particularly its domestic component.<sup>45</sup> With large nominal pay increases and growing interest payments on public sector debt, government current expenditure has started to increase rapidly since 1988. The overall picture is that despite the cuts in central government investment the overall budget deficits throughout the 1980s are 2 to 3 times higher as a share of the nominal GDP than during the 1970-76 period. Growing budget deficits combined with financial liberalization have led to high inflationary pressures in the economy since the late 1980s. The inflationary pressures have gathered momentum particularly since the late 1980s, as the declining real wages, which for much of the 1980s decade helped reduce such pressures, after a certain limit could no longer be relied upon to play that role. Such inflationary pressures resulting from distributional conflicts are only one aspect of the role of the labour market in the adjustment process which will be discussed more fully in the next section.

#### The labour market and the adjustment process

45

The developments in the labour market played a central role in the reform and restructuring process in the Turkish economy during the 1980s decade. The substantial devaluation of the real exchange rate during this period implied a considerable fall in real wages. To attain this, without creating wage price spirals of hyper inflationary proportions, significant changes were introduced in the labour market institutions during the reform period.

The 1960s and 1970s decades were the high points of trade union activity in the Turkish economy. With the granting of the right of free collective bargaining to the trade unions in 1963, they emerged as a dominant force in the labour market up to the take-over of power by the military in 1980. Throughout the 1960s and the 1970s decades the number of unions and union membership was on the increase, and Union militancy, as measured by the

<sup>&</sup>lt;sup>45</sup> In 1979 total interest payments by the government on domestic and foreign loans was only 0.6 per cent of the GDP. By 1988 government interest payments had climbed to 3.8 per cent of the GDP. The interest payments on domestic loans increased from 0.5 per cent of the GDP in 1981 to 2.4 per cent in 1988 and 3.3 per cent in 1992 (Boratav, et al. 1993).

number of strikes and days lost due to industrial action, was also rising, particularly peaking during the recessionary period of 1977-80 when the distributional conflicts intensified. Up to then, the buoyant demand in the highly protected home market and other direct and indirect subsidies by the government had made it possible for the employers to accommodate labour demands while maintaining profitability. With the military take-over in 1980, the militant trade unions were banned, collective bargaining and strikes were suspended, and the Supreme Arbitration Council was established to supervise and settle collective agreements including wage settlements. This also ushered a period of new labour legislation to curb the power of unions. Despite the fact that the role of the supreme arbitration council was limited from 1985 when the collective bargaining process was liberalized once again, the new labour legislation ensured a much more limited power for the unions than in the pre-reform era (Senses, 1989, 1990, Bulutay, 1992, World Bank, 1988b).

The impact of the government interventions in the labour market, combined with other adjustment policies adopted within the reform package during the 1980s, had a dramatic effect on labour remuneration. Real wages are estimated to have declined by more than 50 per cent during the 1977-87 period, while during the earlier decade of 1967-77 they had registered a growth of 30 per cent. In the manufacturing sector real wages grew by about 5.5 per cent a year between 1960 and 1979, while during the 1979-88 period they showed a rate of decline of more than 4 per cent a year (Bulutay, 1992, p.65, and Table T2). As a result, the share wages in manufacturing value added had a decline of more than 20 per cent over the 1980s decade. The share wages in manufacturing value added which had fluctuated between 25 to 30 per cent between 1950 and 1975, first increased to its all time peak of 38 per cent in 1979 at a time of recession and high labour militancy. Subsequently, with falling product wages the share of labour declined from 38 per cent in 1979 to 16 per cent in 1988 (Table T2). The share of wages in value added had a particularly sharp fall in the public sector, as the real wages and salaries in the public sector had a sharper decline than in the private sector, and also as the public sector manufacturing witnessed sharper price increases.<sup>46</sup> With the rapid decline in public sector wages, there was a switch in the wage differentials between the public sector and the private sector during the 1980s decade. While in 1980 the net real wages of public sector workers were on average more than 25 per cent higher than those of the private sector workers, by 1987 the situation had reversed so that the private sector wages were now on average more than 30 per cent higher than the public sector (World Bank, 1988b).47

46

The share of labour in value added in the public sector manufacturing declined from about 52 per cent in 1979 to about 18 per cent in 1989, while the private sector's share declined from 32 per cent to about 20 per cent during the same period (Bulutay, 1992, Table 7, p.60). The high level of wage share in the late 1970s in the public sector was of course only made possible because of the huge subsidies provided by the government for the loss making public sector economic enterprises.

<sup>&</sup>lt;sup>47</sup> The decline in the relative position of government wages and salaries has been going on since the 1950s. In particular the wages and salaries in general government which in 1950 were three times higher than wages in private sector's large

It appears therefore that during the adjustment period the labour market in Turkey exhibited a high degree of flexibility, at least as far as the wages were concerned. A large part of the burden of adjustment seems to have fallen on labour, at least in the public sector and in manufacturing, where data and information are more readily available.<sup>48</sup> Though legal minimum wages were increased throughout the 1980s period well ahead of the rate of inflation, their effect, if anything, seems to have been to reduce pay differentials in the formal sector rather than preventing the downward movement of average real wages in that sector.<sup>49</sup> In any event, legal minimum wages are unlikely to have affected the employment situation in the formal sector significantly, as throughout the 1980s they seem to have remained below the average wages in the small sector or informal manufacturing.<sup>50</sup> With regard to the non-wage aspects of the labour market, as mentioned above, the adjustment period also brought about tighter control over independent labour organizations, and imposed restrictions on trade union activity and the right to strike and free collective bargaining.

To what extent have the changes in the labour market towards greater 'flexibility' contributed to structural adjustment, as well as growth and employment generation in the economy during the 1980s? Surely the decline in real wages during the early stabilization phase of the adjustment period did contribute to short term macroeconomic stability by reducing domestic demand as well as by moderating the inflationary pressures in the economy both from the demand and the supply sides. During this early phase, the military government by imposing a ban on dismissals in both the private and public sectors confined the impact of stabilization to wage decreases rather than employment reductions.<sup>51</sup> The

establishments, by 1980 had already declined to 50 per cent of the latter. The wages in public sector enterprises, however, had kept well ahead of the private sector wage increases and by 1980 they were 40 per cent higher than the latter (see, Bulutay, 1992, p.15). It was the levelling out of the difference between public enterprise and private large establishment wages during the 1980s which seems to have led to the decline of average public sector pay to well below the private sector levels.

<sup>&</sup>lt;sup>48</sup> Agricultural incomes also seem to have suffered due to a substantial movement of the terms of trade against agriculture over the adjustment period. The terms of trade of agriculture, as measured by the ratio of the agricultural over manufacturing value added deflators, declined by about 100 per cent between 1977 and 1988 (Table T2). It seems that the manufacturing sector, the government, and selected branches of services enjoying favourable terms of trade, have been the main beneficiaries of growth in this period (see, Boratav and Turel 1992).

Legal minimum wages were increased from 109 TL per day in 1980 to 1932 TL per day in 1987, which implied an increase in real terms of about 90 per cent. As a consequence the ratio of minimum wages to average wages in public and private sectors combined increased from 25 per cent to about 50 per cent.

According to Senses (1990), the ratio of the average wages in the large manufacturing establishments to that of the small manufacturing (below 10 workers each) declined from 4.8 to 2.8 during the 1980-85 period. The ratio of the average wages in the private sector to the legal minimum wages on the other hand only declined from 5.4 in 1980 to 4.8 in 1986.

<sup>&</sup>lt;sup>51</sup> The ban on dismissals was lifted in 1984, when according Senses (1990) a large number of dismissals in the private sector followed. Job security in the formal sector, particularly in the public sector, is high in Turkey. The policy of reduction of excess labour in the state economic enterprises during the adjustment period mainly took the form of attrition through natural wastage and slowdown in new employment creation. The current severance pay is a lump sum

important question which remains, however, is the impact of the longer term processes of structural change and growth in the post-reform era on employment, and in particular the role of greater wage flexibility in that. In considering the impact of structural adjustment on employment, one needs to go beyond the adjustment processes taking place in the labour market itself and consider the broader macro policy framework and the overall growth performance of the economy as a whole. In doing so, it would be helpful to separate; (i) the effect of the overall growth performance on employment, (ii) the effect of the change in structure of output on employment, and (iii) the effect of the change in the labour intensity of different production processes. The combined effect of the latter two factors determines the change in the output elasticity of employment.

According to the available information, there does not seem to have been any significant improvements in employment generation in Turkish economy during the adjustment period as compared to the earlier inward oriented phase. As in other developing countries, and most other countries in the MENA region, with substantial surplus labour in the agricultural sector and a large informal sector, the definition of unemployment in Turkey faces both conceptual and measurement problems. However, there seems to be a unanimity amongst researchers working with different definitions and different sources of data and measurement methods, that unemployment has been continuously on the rise during the 1980s, and has stabilized, and possibly been declining, since 1988.<sup>52</sup> According to the World Bank estimates reported in Hansen (1989), unemployment increased from about 4 per cent of the labour force in 1966 to about 8 per cent in 1976, and about 12 per cent in 1986. According to the household labour force survey results reported in Mehran and Ozel (1992), unemployment inclusive of underemployment stood at about 16 per cent of the labour force in 1992, with unemployment remaining relatively stable during the 1988-92 period<sup>53</sup>. With the labour force participation ratio declining the 1977-87 period, part of which according to the World Bank (1988b) has been due to falling job opportunities, the increase in the unemployment during the adjustment period may be largely attributed to the slow growth of demand for labour in the economy in this period.

corresponding to one month's salary for every complete year of service, up to 30 years, paid at wage levels prevailing at the time of leaving.

<sup>&</sup>lt;sup>52</sup> For a discussion of sources and methods of labour force data and the different measurements of unemployment see, Hansen (1989), Mehran and Ozel (1992), and Bulutay (1992b and 1992c).

According to the LFS data open unemployment stood at about 8 per cent of the labour force in 1992, with urban and rural rates respectively at 12.1 per cent and 4.7 per cent. There seems to have been a slight decline in the unemployment rate from 8.7 to 8 per cent between 1988 and 1992. For a critique of the LFS results see, Bulutay 1992.

The demand for labour - or more accurately, employment<sup>54</sup> - had a slower growth rate during the adjustment period as compared to the earlier, inward oriented development period. This could be attributed to some extent to the slower growth of the economy during the adjustment period. The larger share of the decline in the growth of employment during the adjustment period, however, seems to have been due to the fall in output elasticity of employment in this period. As shown in Table T4, the output elasticity of employment seems to have declined in most of the sectors during the adjustment period as compared to the fall in the industrial and manufacturing sectors, and the elasticity for the services sector in fact increasing.

The relatively high elasticity of employment in the services sector during all the three periods shown in Table T4, is indicative of the normally slower rate of growth of productivity in services. The increase in the employment elasticity of services during the adjustment period, however, could have resulted from the ease of entry into the low productivity informal services activities at a time when employment opportunities in industry and possibly formal services subsector was being curtailed.<sup>55</sup>

Part of the decline in employment growth during the adjustment period has undoubtedly been due to the slower growth of public sector employment, particularly in the state economic enterprises as a part of the attempt to improve the efficiency and productivity of labour in these enterprises.<sup>56</sup> Instead of adopting an abrupt restructuring policy with large scale redundancies, however, a more gradualist approach was adopted in this regard, relying on a ban on new employment and natural attrition of the existing workforce in the state owned manufacturing enterprises.

Employment in the agricultural sector seems to have been declining during the 1980s at a slightly faster rate than the historical trends since the 1950s. Share of the agricultural sector in total employment declined from 76 per cent in 1960, to about 56 per cent in 1980 and 49 per cent in 1988. The large share of labour force in agriculture may suggest the existence of large scale surplus labour in the sector and indicates the need for fast rates of growth of employment in the non-agricultural sectors to absorb the flow of migrant

<sup>&</sup>lt;sup>54</sup> With the informal sector acting as an absorbing buffer in surplus labour economies like Turkey, as well as the difficulty of filling some skilled jobs in the economy, actual employment figures may not be an accurate indicator of the demand for labour in the economy.

<sup>&</sup>lt;sup>55</sup> A prominent example of the latter is the slowdown in employment growth in government administration during the adjustment period. The skill and educational level of this class of workers, however, is such that they are more likely to inflate the ranks of open unemployed rather than being immediately absorbed in the low productivity informal sector. Evidence of this is the fact that a major share of the increase in unemployment during the 1980s in the urban areas is accounted for by single, young ,educated labour force. On the composition and educational status of the unemployed see, Bulutay (1992b) and Hansen (1991, pp.510-520).

<sup>&</sup>lt;sup>56</sup> According to World Bank (1988b), this seems to have taken place only in the state economic enterprises in the manufacturing sector, with the non-manufacturing enterprises showing an upward trend in employment.

labour out of the agricultural sector over the future years. The slightly faster rate of decline of agricultural employment during the 1980s decade could be partly due to the rapid decline of agricultural terms of trade during this period, which through a squeeze on agricultural incomes could have intensified the rates of rural urban migration. As shown in Table T2, the internal terms of trade which had improved by more than 33 per cent during the 1970-77 inward oriented industrialization phase, showed a decline of more than 50 per cent between 1977 and 1988.<sup>57</sup> The reduction in input subsidies and the fast increase in the prices of the new agricultural inputs, combined with the decline in government investments in the sector may have played their part too. The expansion of irrigation and use of the new land augmenting seed fertiliser technology is an important precondition for the generation of productive employment in Turkish agriculture. An shown in Table T5, during the adjustment period there has been a rapid decline in the rates of growth of fertiliser use and irrigation while the trends towards decreasing population pressure on land seem to have been reversed.<sup>58</sup>

Given the structure of the Turkish economy and the stage of its development, labour absorption in the industrial sector and in particular in manufacturing is of crucial importance. The relatively large decline in the employment elasticity of the industrial sector in the postreform period is, therefore, of some concern - specially given the substantial relative factor price adjustments which took place during this period. The manufactured exports during the 1980s appear to have been by and large based on fuller capacity utilization in old capital intensive import substituting establishments with relatively low employment generation effect. The provision of generous subsidies combined with the substantial wage compression in the early 1980s had transformed the old inefficient industries into profitable exporters (Senses, 1990). Fixed investment in the manufacturing sector in fact declined during the 1977-92 period largely as a result of the decline in the public sector investment, despite the above 7 per cent per annum output growth rate during the 1980s decade.<sup>59</sup> This lack of investment response in the manufacturing sector is said to have retarded structural change. innovation, and new employment generation and skill formation in the sector (Celasun, 1991, Boratav and Turel, 1993). The high inflation and high interest rates were important factors in hindering capital reallocation towards manufacturing (Celasun 1991, Conway

<sup>57</sup> The majour part of the decline was concentrated in the 1977-82 period.

<sup>&</sup>lt;sup>58</sup> For a recent study of the rural labour market in Turkey see, Keyder (1989). See also, Kazgan (1992), where it is argued that Turkish agriculture during the 1980s regressed towards extensive farming, through reduced use of modern inputs and reduction of fallow.

<sup>&</sup>lt;sup>59</sup> The share of manufacturing in total fixed investment declined from 38 per cent in 1973-77 to 19 per cent in 1984-88. Manufacturing investment in the public sector in 1992 was about 80 per cent below its 1981 level. Private investment in manufacturing declined by about 50 per cent between 1977 and 1981. During the 1981-89 period it showed a gradual increase but by 1989 it was still some 20 per cent below its 1977 level. In 1990 private manufacturing investment recorded a phenomenal increase of about 65 per cent, but since then it has remained relatively stagnant at that level. Despite such increases, total investment in the manufacturing sector in 1992 is still 20 per cent below its 1977 level (see, Boratav, et al. (1993).

1990, Rodrik 1990). This, in addition to increasing the cost of external borrowing in manufacturing, seems to have also drained the sector - particularly public sector manufacturing - of internal funds for investment. According to the estimates by Boratav, *et al.* (1993), the share of interest costs in industrial gross profits increased from about 13 per cent in 1979 to close to 70 per cent in 1991. This seems to have wiped out a significant part of the gains through the terms of trade improvements and lower labour costs in the manufacturing sector. The low degree of investment and capacity formation in the manufacturing sector apart from its employment effects, is also a cause of concern about the ability of the economy to sustain its manufacturing export performance - given the relatively high rates of capacity utilization in the sector achieved by the early 1990s.

To sum up, the experience of Turkey signifies the limits to which labour market flexibility, in particular wage flexibility, could contribute to long term structural adjustment processes. A substantial part of the burden of adjustment during the 1977-88 period was carried by labour particularly in the formal sector through significant real wage reductions and drastic cuts in the share of wages in value added. The public sector acted as the leading sector in this process of wage compression. The process of adjustment led to a significant growth of manufacturing exports and considerable diversification in the composition of exports. Much of the growth of industrial output during the adjustment period, however, was based on the production capacity generated in the earlier phase of import substitution industrialization. Despite the relatively high growth of manufacturing output and considerable improvement in capacity utilization, manufacturing investment remained stagnant. The high interest rate policy and financial liberalization exerted a negative influence on the rate of capital formation in the economy. The stagnant industrial investment meant that the envisaged factor substitution towards higher labour intensity in the industrial sector did not materialize, and in fact despite substantial relative factor price changes the output elasticity of employment during the adjustment period showed a decline. Considerable relative price changes against the agricultural sector and the decline in agricultural investment also worsened the conditions of work in agriculture and intensified the outflow of labour from the sector. Despite the considerable relative price changes in favour of the manufacturing, the share of employment in services sector increased significantly.

The relatively high degree of industrial development in Turkey compared to most other MENA region countries, the relative strength of its organized labour institutions, and the prevailing semi-democratic political process for much of the adjustment period meant that resort had to be made to inflationary process to bring about the real wage compression. This was particularly so, as the adjustment programme was introduced by the government in a unilateral manner without co-operation from labour unions. The case of Morocco which will be discussed next, refers to one of the least industrialized countries in the region with relatively weaker organized labour institutions.

### 7. THE EXPERIENCE OF MOROCCO

Morocco is the second country in the MENA region which has been classified by the World Bank as an 'early intensive adjustment lending country', with a stabilization and adjustment programme initiated in 1983 with the support of the IMF and the World Bank. Like Turkey, Morocco is often cited as a case of successful adjustment, where economic stabilization and structural adjustment is said to have taken place in the context of growth (World Bank, 1988a, 1990, Morrisson, 1991). This is an important achievement that could be of great value to other countries which due to high unemployment and social problems arising from low incomes and mass poverty cannot afford to undergo economic restructuring which may lead to further loss of employment and income in the short run.

The post-1983 stabilization and restructuring programme took place in the context of a balance of payments crisis which was the culmination of a period of severe external shocks and the lack of adequate resilience of the economy to adjust to these shocks. During the 1960s and 1970s decades an inward oriented industrialization strategy was followed, with a high degree of state intervention and control.<sup>60</sup> Relying on the highly protected home market and the foreign exchange proceeds from primary exports, and with the passage of time increasingly obtained through foreign borrowing, moderate rates of industrial and GDP growth (between 4 to 5 per cent per annum) were achieved during this period. Considering the moderate rates of industrial growth during these two decades, the scale of the foreign exchange crisis that the country faced towards the end of the 1970s and the early 1980s may seem surprising. As it turns out, however, the foreign exchange crisis of the early 1980s had more to do with the external shocks to the economy during the 1970s and the nature of government response to these shocks, than with the long term consequences of the industrialization strategy as such. Though, the inward oriented industrial structure reduced the flexibility to adjust to external shocks and was a contributing factor in the postponement of the necessary adjustment measures for some time.

The first shock to the economy occurred with the commodity price boom of the early 1970s. The threefold increase in phosphate prices in 1974 implied a substantial

<sup>&</sup>lt;sup>60</sup> State economic enterprises played an important role in manufacturing and mining. In the industrial sector the share of the government is more than 45 per cent, with almost total control in a number of branches such as, paper, oil refining, tobacco and chemicals. The agricultural exports as well as the imports of tobacco, tea and sugar were in the monopoly of the public sector. In addition, through the regulation of foreign trade and control of the processes of various products and factors of production the government also exerted a high degree of control over the processes of resource allocation through the market mechanism. For more details see, World Bank, 1989, 1984, and Morrisson, 1991.

improvement in the international terms of trade for Morocco, despite the fact that it was an oil importing country. Between 1973 and 1975 the international terms of trade moved by 30 per cent in favour of Morocco. This was, however, followed by a sharp decline in phosphate prices in 1976, and a continuous deterioration in the external terms of trade down to 1983. The external terms of trade deteriorated by 23 per cent in 1976 and by more than 40 per cent during the 1975-83 period (Table M2). The government's initial response to the terms of trade improvement during 1973-75, and its subsequent policy changes in response to other internal and external shocks shaped the development path of the economy during the 1970s, leading to the foreign exchange crisis of the 1983.

Being the chief beneficiary of the phosphate price boom of 1973-75, the government immediately initiated a programme of major spending. This comprised of the start-up of ambitious investment projects in infrastructure and industry, substantial increase in current spending including generous wage and salary increases in the public sector, and subsidization of basic commodities and foodstuff. Total government expenditure increased from about 22 per cent of the GDP in 1973 to over 40 per cent in 1976. The volume of government investment increased by more than 3 times during this period, while the civil service pay increases of more than 30 per cent were recorded between 1973 and 1975 (Table M2). Expansion of demand and lax monetary policy also created a boom in the private sector, with total investment increasing from about 17 per cent of the GDP in 1973 to more than 34 per cent by 1977 (Table M3). The over-reaction of the government to the phosphate price boom was such that in 1975 even before the collapse of the phosphate prices the budget deficit had jumped to almost 10 per cent from the 2-3 per cent level which it had maintained in the earlier years. By 1977 the budget deficit was above 15 per cent of the GDP, with the current account of the balance of payments and the domestic resource gap standing at 17 per cent and more than 20 per cent of the GDP respectively<sup>61</sup> (Table M3).

During the 1978-83 period a number of unsuccessful stabilization attempts were made by the government with support from the IMF. In 1978 the government introduced a stabilization package which consisted of a reduction in government investment, increase of import taxes and other import compression measures, and a squeeze on private sector credits. This programme, however, was soon abandoned as a result of the second oil price shock in 1979, draught and mounting social opposition to the reforms. A second stabilization attempt in 1980 also had to be considerably revised as a result of social unrest and further external shocks such as the severe drought in 1981 which led to more than 29 per cent decline in agricultural output, rise in the interest rates at the world level, and further adverse terms of trade movements in the early 1980s. During the 1980-82 in fact the government embarked

The difference between the changes in the current account deficit and the domestic resource gap is explained by the variations in the net factor income and net current transfers from abroad.

on an expansionary policy through increased foreign borrowing, which intensified the existing imbalances in the economy. The balance of payments deficit increased from about 8 per cent of the GDP in 1980 to more than 14 per cent in 1982, and the cumulative external debt rose from \$6 billion in 1979 to more than \$12 billion by the end of 1982 (Table M3). The growing external imbalances led to virtual exhaustion of foreign exchange reserves by the mid-1983, which forced the government, after implementing emergency import restrictions and drastic budget cuts, to resort to the IMF and the World Bank for loans and for help to reschedule its foreign debt. This also made the government enter into new stabilization and adjustment agreements which heralded an important structural break in the development path of the economy.<sup>62</sup>

The post-1983 adjustment programme consisted of a set of short term stabilization measures under the IMF agreement, together with measures introduced towards liberalization and long term structural reform of the economy, largely assisted by the World Bank structural adjustment agreements. The stabilization programme was directed towards reducing aggregate demand through cuts in government investment, credit squeeze, devaluation, and reduction of food and other subsidies.<sup>63</sup> What distinguished the post-1983 stabilization programme from earlier attempts, apart from its being more rigorously implemented, was its combination with the structural adjustment package which aimed at stimulating output in export oriented industries and enhancing growth by more efficient and fuller utilization, extensive liberalization of price controls and removal of the government trading monopolies, continued devaluation of the official exchange rate and narrowing of the gap between the official and parallel market rate, reduction of producer and consumer subsidies, reform of the tax system, and in general greater market orientation of the economy<sup>64</sup>.

<sup>&</sup>lt;sup>62</sup> Between 1980 and 1983 the IMF had already lent Morocco close to \$1 bn. The new standby loan from the IMF amounted to SDR 300 mn which covered the period from September 1983 to February 1985, and the World Bank advanced \$600 mn Industry and Trade Policy Adjustment (ITPA) for the 1984-86 period. As a result of the new adjustment agreement, Morocco also obtained a rescheduling of its external debt from the Paris Club and the London Club amounting to about \$2 bn. For a detailed account of the IMF and World Bank agreements with Morocco see, Horton (1990).

<sup>&</sup>lt;sup>63</sup> Government investment declined from 13 per cent of the GDP in 1982 to about 6 per cent in 1985 (Table M3). Through a series of devaluations the real effective exchange rate was lowered by more than 12 per cent between 1982 and 1984 and by about 30 per cent in 1982-90 period (Table M3). Government subsidies were reduced from 3.2 per cent of the GDP in 1982 to 2.7 per cent by 1984 and about 1 per cent by 1987 (Horton, 1990). As a result the prices of sugar, cooking oils and flour were increased by 30 per cent, 52 per cent, and 87 per cent respectively between 1983 and 1985. Subsidies on the prices of butter, milk, flour and petroleum products were also reduced. To reduce the losses of public utilities, the charges for water, electricity and public transportation were also periodically increased (Morrisson, 1991, Ch.3).

<sup>&</sup>lt;sup>64</sup> A comprehensive report on trade liberalization during the 1980s is provided by GATT (1990). During this period import quotas were largely replaced by tariffs and the general level and spread of tariff rates were also reduced. During the first three years of the reform maximum import duty fell from 400 per cent to 45 per cent and the average duties declined from 59 per cent to 36 per cent. Greater credit facilities were also provided for exports, and export taxes in the non-mineral sectors were removed. Tax reform in this period was towards the creation of greater uniformity of indirect taxes, the high point of which was the introduction of VAT in 1986. Interest rates were raised so that they were

The adjustment programme seems to have had a considerable degree of success in redressing some of the imbalances in the economy. Government budget deficit was reduced from more than 11 per cent of the GDP in 1982 to 4.5 per cent in 1987 and 3.5 per cent in 1990, largely brought about by cuts in government investment and reduction of subsidies and current transfers. The deficit in the current account of the balance of payments also declined considerably during the adjustment period; it fell from more than 13 per cent of the GDP in 1982 to 2 per cent on average in the latter half of the 1980s decade and even showed a surplus in 1988 (Table M3). The improvement in the balance of payments was partly a result of the reduction in the rate of growth of imports resulting from the slower rate of growth of the GDP and in particular in investment in the post-reform period. As can be seen from Table M4, the rate of growth of imports during the 1982-90 period declined moderately as compared to the 1970s decade and returned to the overall trend growth rates of the 1960s.65 More important causes of improvement in the current account during the adjustment period were the fast rates of growth of exports and the improvement in the external terms of trade. Tourism, labour intensive activities in textiles and garment industries, and manufacturing of phosphate derivatives largely developed during the 1970s investment boom, were the main sources of the rapid growth of export revenues during the post-1983 adjustment period. The 6.1 per cent per annum growth of exports during the 1982-90 period, was more than twice the trend growth rates during the 1960s and the 1970s decades (Table M4). In the meantime, as shown in Table M2, the external terms of trade which had declined by more than 40 per cent between 1975 and 1983, had an improvement of about 17 per cent during 1983-87 (Table M2). This reversal in the external terms of trade movement had a considerable effect in closing the gap between the export and import values.

What has been often pointed out as a remarkable achievement in the case of the Moroccan adjustment experience is that the rapid move towards external and internal balance has taken place while maintaining economic growth. For an appraisal of the impact of the post-1983 stabilization and adjustment measures on the economic performance it is important to note that the agricultural sector, being predominantly rainfed, has been subject to considerable exogenous shocks due to changing weather conditions. While in 1983, the negative growth of agriculture due to bad weather conditions seems to have accentuated the deflationary effect of the stabilization programme, in subsequent years, particularly in 1985 and 1986 exceptional growth of agricultural output helped to sustain overall economic

made positive (Table M2), and price controls over various industrial and agricultural products were removed. For more detailed discussion of the policies which constituted the structural adjustment package see, Horton (1990), Morrisson (1993) and GATT (990).

<sup>&</sup>lt;sup>65</sup> The slowdown in the rate of growth of imports during the 1980s decade has not been due to a reduction in the import propensity. On the contrary, the income elasticity of imports seems to have increased during the adjustment period. But this has been more than compensated by the slowdown in the rate of growth of the economy.

growth during the early stabilization years (Table M1). During the first two years of the stabilization programme the most severely affected sector was construction, which had a negative growth of -5 per cent a year largely due to the government investment cuts. However, with the growth of demand originating in the private sector as a result of fast increase in agricultural output, growth of tourism and of export industries, the construction sector resumed growth in 1985. The industrial sector had a slow start during the first two years of the stabilization programme, but in later years with the structural adjustment policies starting to make an impact, industrial growth gathered momentum.

Given that a central idea behind the structural adjustment policies has been to boost the supply response of the traded goods sectors and in particular manufacturing supply, the performance of the manufacturing sector is of crucial significance in appraising the impact of these policies on output, income, and employment generation in the economy. This is particularly so, because, as in the case of Turkey, manufacturing rather than agriculture appears to have been the main beneficiary of the internal terms of trade changes in the domestic economy (See, Table M2). Manufacturing output remained stagnant during the 1983-84 period, but between 1984 and 1989 it grew at an average annual rate of 2.5 per cent a year. As expected for a period of restructuring, the performance of different subsectors within manufacturing varied from sector to sector. On the one hand industries such as textiles and garment which spearheaded the new export drive, as well as import substituting industries such as iron and steel, metal products and transport equipment showed positive and above average growth. On the other hand, industries such as food products, footwear, wood products, and paper and products which relied on the growth of domestic demand showed negligible or even negative growth as a result of the slow growth of domestic demand as well as competition from imports.<sup>66</sup>

The overall growth performance of the Moroccan economy, as depicted in Table M4, indicates noticeably slower growth rates during the adjustment period as compared to the 1960s and the 1970s decades -- in particular in relation to investment growth and the growth of the industrial sector. Of course, to the extent that the earlier growth process particularly during the 1970s is considered to have been unsustainable, the slowdown in growth during a period of structural adjustment may seem natural.<sup>67</sup> However, the sustainability of the growth process in the long run depends, amongst other things, on the ability to maintain an adequate rate of investment, both in productive activities and in social

Textiles, iron and steel, metal products, and transport equipment respectively showed average annual growth rates of 3.1 %, 13.8%, 16.3%, and 6.3% during the 1980-89 period, whereas food products, footwear, wood products, and paper and products showed growth rates of -1.0%, -4.0%, -0.1%, and 0.5% respectively during the same period (UN, 1991).

<sup>&</sup>lt;sup>67</sup> One should, however, also bear in mind that the post adjustment period was one in which the international terms of trade, after a decade of adverse movement, turned considerably in favour Morocco. The country also benefited from considerable external assistance during this period.

and economic infrastructures. This may be easily overlooked in a stabilization and adjustment programme which is mainly concerned with the alleviation of medium term budgetary and foreign exchange imbalances. This may have been the case in Morocco, particularly with regards to the investment in social and economic infrastructure and also in the way it has affected private investment in productive activities. The work by Schmidt-Hebel and Muller (1991) shows a significant decline in the rate of investment in the private sector particularly in machinery and implements during the first five years of the adjustment programme. A main explanatory factor is found to be the rapid increase in the user cost of capital caused by the rise in interest rates, increase in the price of capital goods relative to the output prices, and reduction of government tax exemptions on company profits. The increase in uncertainty in a period of rapid policy change and experimentation, and the decline in government investment in complementary infrastructural investments are amongst the other main factors in explaining the decline in the rate of private investment. Given that the rate of private savings is shown to be inelastic with respect to the change in real interest rates in Morocco (see, Schmidt-Hebel and Muller, 1990), rising interest rates during the adjustment period seem not only to have discouraged private investment in productive activities, but also they do not appear to have contributed to the reduction of the domestic resource gap by inducing higher private savings.

The decline in the rates of investment activity is clearly illustrated by the developments in the agricultural sector during the adjustment period. As can be seen from Table M5, the trends towards increasing irrigation ratio and greater use of modern inputs such as fertilisers and tractors during the 1970s are radically slowed down and in some cases even turned negative over the adjustment period. Of course, the high rates of output growth in the agricultural sector during the adjustment period are indicative of fast rates of improvement in the efficiency of input use within the sector, which has been partly due to relatively better weather conditions during this period and perhaps partly due to the effect of the change in price incentives in the sector. But continued output growth in the long run is inconceivable without greater investment in irrigation and increased use of modern land augmenting productive inputs. This is also a precondition for the growth of productive employment in the sector.

#### The labour market and the adjustment process

The role of the labour market in the stabilization and adjustment process in the Moroccan economy has been critical. An important policy tool in the adjustment process, as we have seen, has been the devaluation of the exchange rate. The response of money wages to the devaluation of the exchange rate largely determines the effectiveness of devaluation as a policy tool, both in dampening demand during the stabilization phase and in stimulating

supply through improved cost competitiveness in a longer term adjustment context. The sustained depreciation of the real effective exchange rate along with continued real wage reductions, and relatively low inflationary pressures, during the adjustment period is indicative of the a high degree of flexibility of the labour market with regard to wage determination.

It is particularly significant that, in the contrast to the case of Turkey, real devaluations during the adjustment period took place under the conditions of low inflation and low rates of money wage increases. This is indicative of weaker labour institutions in the case of Morocco and the greater ease with which the government could suppress money wage demands in the public sector. Two main channels through which the government exerted a direct influence on the wages were, first through public sector pay, and secondly through minimum wage legislation. Given that the public sector was a major employer in the urban sector, its employment and pay policy exerted an important influence on the labour market in general. As can be seen from Table M2, public sector wages, leading the other sectors, had the fastest rate of decline as compared to any other wage category shown in the The fall in public sector real wages began well before the post-1983 adjustment table. programme was introduced. With the end of the phosphate price boom in 1976 public sector real wages began their decline and by 1983 they had already fell by about 30 per cent, while during the same period other wage categories shown in Table M2 were more or less stable in real terms and some even showed a slightly upward trend. During the adjustment period, at least up to 1988, all the different wage categories in the urban areas for which data are available declined by about 3 per cent a year in real terms, but the public sector wages even in this period led the decline and also fell faster than other wage categories (Table M2). Given that this was also a period of slowdown in public sector employment, the direct public sector pay and employment policies during the adjustment period seem to have enhanced the flexibility of the labour markets in general.

The Moroccan government has also been setting legal minimum wages for agriculture (Minimum Guaranteed Agricultural Salary, SMAG) and for industry (Minimum Guaranteed Inter-professional Salary, SMIG) since 1971.<sup>68</sup> A study of Moroccan labour market in 1979 concluded that `the legal minimum wage rates in agriculture [and in urban areas] were probably not above equilibrium wage rates [sic] and certainly not very disruptive...',<sup>69</sup> Given that since 1979 minimum wages have grown slightly faster than the wages of unskilled labour (see Table M2), this conclusion may have to be revised for later years. However, on the basis of evidence for later years which suggested urban legal minimum wages were a fraction of average wages in various activities in the informal sector,

<sup>&</sup>lt;sup>68</sup> Up to 1973 there existed another lower SMAG for women, which was abolished in that year.

<sup>&</sup>lt;sup>69</sup> World Bank 1979 country report quoted in Montoliu (1989).

and lack of serious enforcement of the legal minimum wage regulations in other activities, Montoliu (1989) concludes that the minimum wage legislation does not appear to have had a disruptive effect on the labour market.<sup>70</sup> The evidence on the behaviour of various wage categories in Table M2 also seems to support this view. Firstly, there seems to be no correlation between minimum wages and the wages of unskilled labour.<sup>71</sup> Secondly, during the adjustment period the real wages of the unskilled labour fell faster than real legal minimum wage index, and indeed much faster than the wages of skilled labour. The implication being that either the legal minimum wages are not enforced properly, or alternatively they are so low that their movement exerts little influence on actual wages of the unskilled labour.

It appears, therefore, that at least as far as the process of wage determination is concerned the Moroccan economy during the period under study exhibited a high degree of flexibility in the sense that a large part of the burden of adjustment was carried by declining Government minimum wage legislation did not seem to create any obstacles to real wages. the downward adjustment of real wages in the private sector, while the government itself spearheaded the wage adjustment process with public sector real wages falling faster than the private sector. Apart from its minimum wage legislation, there were of course other regulatory interventions by the government in the labour market. These other aspects of labour market regulation, which covered issues such as redundancy, social security, retirement, etc., as codified in the labour law, did not undergo any significant changes during the adjustment period.<sup>72</sup> The labour law however did not cover the majority of the labour force working in the informal sector, and even in the formal sector it was not adhered to strictly. As pointed out by Montoliu (1989), 'labour regulations neither fully protect workers nor create major constraints for the development of enterprise. The main reason for this is the loose application of labour rules'.<sup>73</sup>

To what extent has the flexibility in the labour market impinged upon the workings of the post-1983 stabilization and adjustment programme, and how has it affected

<sup>&</sup>lt;sup>70</sup> This of course refers to the urban areas. The legal minimum wages in agriculture are likely to be only binding for a small number of large commercial farms and the majority of small peasant holding units are untouched by it. The degree to which SMAG acts as a binding minimum wage in rural areas is not clear. Azam (1992), assuming SMAG being binding in the commercial agriculture, finds a positive correlation between minimum wages and employment and output. He explains this by applying a monopsony model of the labour market, where a small number of large commercial farms face a pool of agricultural labour.

<sup>&</sup>lt;sup>71</sup> In fact the correlation coefficient of the two wage series, namely the legal minimum wage index and the wages of unskilled labour both measured in real terms, is -0.24, suggesting, if anything, a negative relation between the two.

<sup>&</sup>lt;sup>72</sup> For more detailed discussion of labour market regulations see, Montoliu (1989) and Aloui and Dethier (1990). Total social insurance burden on the employers was 13.8% of the payroll, consisting of 3.36% coverage for old-age, invalidity and death, 0.44% sickness and maternity, and 10% unemployment benefits, plus whole cost of work injury insurance premiums or direct benefits.

<sup>&</sup>lt;sup>73</sup> This is confirmed by Aloui and Dethier (1990) who maintain, 'In general, however, these legal norms do not represent an effective constraint for private sector activity'.

employment creation in the economy? As we have seen above, the decline in real wages played an important part in redressing the macroeconomic imbalances in the economy in the adjustment process from both the supply side and the demand side. Without the fall in real wages, the deflationary effect of the stabilization programme, certainly in the public sector, would have led to greater redundancies and unemployment. The real wage reductions also played their part in bringing about the real devaluation of the exchange rate and the restructuring of the economy towards greater expansion of export oriented industries such as textiles and garments. The overall employment effect of the structural adjustment programme, and the role of labour market flexibility in that, however, has to take into account broader processes affecting the overall output growth, the changes in the structure of output, as well as the changes in labour intensity of production processes.

The overall employment situation in Morocco over the past two decades has been one in which rapid rate of labour supply growth has outstripped the increase in the demand for labour, thus creating a situation of persistent and rising unemployment. The unemployment problem is particularly acute in the urban areas and seems to have been accentuated during the adjustment period. A 1991 survey puts the unemployment rate at over 20 per cent of the labour force in urban areas, which compares to just over 12 per cent in 1982 (World Bank 1993)2.<sup>74</sup> Rural unemployment seems to have remained relatively more stable at around 5 per cent during the past two decades. Urban unemployment rates are higher amongst the women, the youth (15-24 age group), and those with primary and secondary education.<sup>75</sup> In 1986 more than 30 per cent of the urban unemployed had their previous jobs in industry, and more than 18 per cent came from construction. Amongst the women unemployed in the urban areas the majority had their previous jobs in domestic or personal services. Unemployment in Morocco thus seems to be more due to a general oversupply of labour rather than a mismatch between supply and demand for different categories of labour.

The supply of labour has been growing fast in the Moroccan economy as a result of a combination of high rates of population growth, the increasing proportion of the working age population (15-64 age group), and growing labour force participation. Population

<sup>&</sup>lt;sup>74</sup> Urban unemployment has fluctuated considerably over the past decades. According to population censuses of 1971 and 1982 urban unemployment declined from 15.3% in 1971 to 12.3% in 1982, and the labour force surveys show rates of 18.4%, 13.5%, and 15.5% respectively for 1984, 1985 and 1986. The 1991 survey reported in World Bank (1993) indicates a rate of unemployment of above 20 per cent for that year.

<sup>&</sup>lt;sup>75</sup> In the urban areas in 1986 the female unemployment rate was 20.4% as compared to 13.9% for men, and the unemployment rate seems to have been growing faster among women than among men during the 1982-86 period. In 1986 the rate of unemployment in the 15-24 age group was two times higher than the average for the whole population, and this age group contained more than 50% of the unemployed in the urban areas. The rates of unemployment amongst different educational groups were 13.3% with no educational degrees completed, 20.8% for primary school completed, 28% for secondary school completed, and the unemployment rate for graduates from professional training programmes was more 27.6 per cent in 1986 (Montoliu, 1989).

growth rate has increased from 2.5 per cent in the 1960s to 2.7 per cent in the 1980s, while the working age population has been growing at just over 3.5 per cent a year during the 1970s and 3.1 per cent a year during the 1982-87 period. These trends together with rising participation rates within the working age population and growing rural urban migration have given rise to growth rates of labour supply in the urban areas of close to 6 per cent per annum during the 1980s. This has posed stringent employment generation requirements which the Moroccan economy during the adjustment period seems to have failed to fulfil by a significant margin.

Apart from growing visible unemployment this seems to have led to increasing underemployment of labour in the economy during the adjustment period as well. Table M6 shows output elasticity of employment in different sectors of the economy for the 1982-88 period. As can be seen in almost all the sectors of the economy and for the economy as a whole the employment elasticity is considerably above unity, indicating declining labour productivity during the adjustment period. The high employment elasticity in the case of agriculture may look paradoxical as this was a period of relatively rapid growth in agricultural output. This, to the extent that it is not the result of inaccuracies of data, may be explained by the slowdown in employment opportunities in non-agricultural sectors, particularly in construction and public works, leading to higher retention rates of surplus agricultural labour in the sector itself. As discussed in the previous section, the slowdown in the rate of investment in the agricultural sector, particularly the slowdown in the rate of irrigation and the related labour intensive farming, could have also played an important role in declining labour productivity in agriculture. The fall in the productivity of labour in other sectors of the economy also indicates a growing absorption of labour in low productivity informal activities and growing underemployment in these sectors, taking the form of work sharing either by greater use of family labour in production units or through increased division of a stagnant market amongst a growing number of petty producers. This is supported by the fact that, during a period when the terms of trade have moved so drastically against the non-traded goods sectors, the services sector shows the highest elasticity of employment, as it is a sector where ease of entry makes it more readily accommodating to the growing surplus labour in the economy. The intensity of labour productivity decline and growing underdevelopment in services is shown by the high output elasticity of employment of close to 4 for services as a whole, and the staggering elasticity of almost 7 for services other than commerce, transport and communications, and public administration (Table M6).

The same processes seem to have been taking place in the industrial sector, which exhibited the second highest rates of decline in labour productivity after services. Table M7 gives a disaggregated breakdown of the output and employment growth in the large and medium sized manufacturing sector (with more than 10 employees) in Morocco during the

1983-88 period. The output elasticity of employment in the case of large and medium sized manufacturing seems to be much higher than the elasticity values for the overall industrial sector shown in Table M6, implying an annual rate labour productivity decline of more than 6.5 per cent a year. This sheds doubt on the comparability of output and employment data in Table M7 and calls for caution in interpreting the data in that table, particularly in view of the fact that in various manufacturing branches shown in the table despite high negative output growth rates, employment seems to be growing fast. The data in Table M7, nevertheless, highlight some interesting aspects of the industrial restructuring and employment generation during the adjustment period. As discussed earlier, during the adjustment period some major industries such as food products, leather and products, wood and products, paper and products, chemicals and electrical machinery showed negative growth rates<sup>76</sup>. Of the growing manufacturing branches textiles and garments account for the absorption of almost 40 per cent of the increase in employment during the 1983-88 period. The garment industry, almost doubling its share of employment in total between 1983 and 1988, was in fact the only industrial branch with an increase in its share of employment. It appears therefore that the adjustment period has indeed witnessed an increase in the share of employment in export oriented industries, though on the basis of available data it is not possible to estimate the extent to which the labour intensity of production processes within each branch has changed during this period.

What is significant is that even in the case of relatively fast growing industries such as textiles, plastics, glass and products, and possibly garments, the productivity of labour seems to show abnormally high negative growth rates during the adjustment period.<sup>77</sup> The questions related to the accuracy of the data apart, this picture of industrial retrogression is not inconsistent with the overall evidence which shows low industrial investment combined with rapidly increasing labour supply in the non-agricultural sectors of the economy - though the question of the institutional set-up of the industrial sector which could allow this phenomenon to take place still needs to be explained.<sup>78</sup> In the case of the garment industry, the main exporter and employment generating manufacturing branch, the increasing casualization of employment and use of cheap casual female labour reported in the literature

<sup>&</sup>lt;sup>76</sup> The fact that food industry witnesses fast negative output growth rate during a period of fast agricultural growth is of course an anomaly which as with other anomalies of the Moroccan industrial data discussed in the text shows the need for further research.

<sup>&</sup>lt;sup>77</sup> The output data for garment industry in Morocco is not provided in the Industrial Statistics Yearbook. However, considering the 5.3 per cent annual output growth for the Textiles industry and the extremely high growth of employment of 23.2 per cent a year in the garment industry, it likely that as in textiles the productivity of labour in the garment industry has been declining during the 1983-88 period.

<sup>&</sup>lt;sup>78</sup> Long periods of declining productivity growth and at the same time growing labour productivity, to the extent that it is not compensated for by a similar decline in real product wages, is likely to take place only in public sector enterprises where increased employment can take place without profitability considerations.

is also consistent with declining labour productivity levels.<sup>79</sup> However, it is unlikely that, without productivity growth, this process of cheapening of labour could be relied upon in the long run to sustain the growth of output and exports even in the textiles and garments industries.

To sum up, the experience of Morocco, similar to the case of Turkey, suggests the existence of a high degree of flexibility in the labour market during the adjustment process. In particular, real wage reductions played a central role in both the stabilization of domestic absorption from the demand side and in the restructuring of the industrial sector towards export oriented labour intensive industries such as clothing and knitwear. Real wage reductions in the public sector led the process of wage compression in the economy and legal minimum wages did not hinder this process either. The negative growth of a major part of the domestic industry and the overall decline in the rate of industrial investment, seem to support the view that in fact too much downward real wage flexibility has had an overall negative impact on industrial growth through demand deflation. As in the case of Turkey, the high interest rate policy and moves towards greater liberalization of the financial markets seem to have had a negative effect on private investment. The low investment rates imply that the process of factor substitution towards greater labour intensity within individual production processes may have not taken place as suggested by economic theory. With fast rates of growth of the supply of labour and the inability of the traded goods sectors such as manufacturing and agriculture to generate sufficient productive employment, the services sector became the main sector for employment of surplus labour in the economy, which was reflected in the fast rates of growth of employment and rapid productivity decline in the sector.

### 7. CONCLUDING REMARKS

The economies of the MENA region are characterized by high rates of growth of the labour force and a relatively low stock of human capital and skills. Rapid rates of growth of primary commodity exports during the 1960s and the 1970s decades allowed high enough rates of investment growth and employment creation in the region to avert large-scale unemployment problems. High rates of growth of industrial investment and substantial increases in government investment in formal education during these two decades brought about a relative increase in the stock of skilled and trained labour force. The high degree of

<sup>&</sup>lt;sup>79</sup> See, e.g., Joekes (1982, 1985) and Moghadam (1994). As can be seen from Table M7, wages in garment industry are less than half the wages in the overall industrial sector and less than a third of those in industries such as transport equipment and chemicals.

mobility of labour between the countries in the region also helped to bring about a better balance in the labour markets of the surplus-labour and labour-shortage economies.

With the end of the oil boom period since the early 1980s the MENA region economies have faced serious external and internal imbalances which has led to the collapse of the investment process and growing unemployment and underemployment of labour in the region. The development strategy based on inward-looking industrialization policies and propelled by the rapid growth of the primary commodity exports in the earlier period, clearly became unsustainable in the post oil-boom era. As a result, new development strategies based on greater marketization and outward-looking industrialization policies have been adopted by various countries in the region since the 1980s. One of the main questions which we have been concerned with in this paper relates to the role of labour market flexibility in the adjustment process, and the relation between the adjustment policy mix and employment creation in the economy.

The case of Egypt, as a recepient of a massive amount of external resources during the oil boom, and following a state-led inward looking industrialization strategy, epitomizes the problems of employment generation and economic adjustment facing the surplus labour economies in the region during the post oil boom era. The high rate of growth of investment in the Egyptian economy during the oil boom, combined with a substantial outflow of labour to the oil surplus, labour shortage economies in the region, prevented rising unemployment in the Egyptian economy despite fast rates of growth of the labour force. The structural problems which developed in the Egyptian economy during this period were not due to the crowding out of the traded goods sectors by the non-traded goods sectors through a labour squeeze and undue increases in real wages. As in the case of the other MENA region economies, these problems had more to do with the production inefficiencies in the new investment projects which were embarked upon on a massive scale in the traded goods sectors during the oil boom. As a consequence, the end of the oil boom gave rise to unsustainable foreign exchange and budgetary imbalances which halted the growth of the economy and led to a rapid decline in investment from the mid-1980s. The growing unemployment and underemployment of labour in the Egyptian economy since the early 1980s has been exacerbated by the closure of the foreign migration option, and an actual inflow of migrant returnees since the early 1990s.

The rapidly worsening unemployment situation, despite the considerable downward real wage flexibility exhibited by the Egyptian labour markets since the mid-1980s, suggests that the solutions to the unemployment problem have to be sought in factors other than those immediately connected to the functioning of the labour markets. As in other late adjusting surplus labour economies in the MENA region, the long term solution to the unemployment

problem crucially hinges on the success of the adjustment policies pursued since the late 1980s in bringing about a more efficient utilization of resources, including labour, and in particular in generating an adequate rate of investment and savings in the domestic economy. Given that Turkey and Morocco have had the longest experience of economic adjustment amongst the MENA economies, in the last two sections of the paper we concentrated on the lessons which could be learnt from the experiences of these two countries for the rest of the countries in the region which as in the case of Egypt have started their adjustment programmes in more recent years. As we observed both these economies have shown a high degree of real wage flexibility during the adjustment process. A substantial part of the burden of adjustment in both economies was carried by labour in the formal sector through real wage reductions and drastic cuts in the share of wages in value added. The public sector acted as the leading sector in the process of real wage compression in both economies. The real wage compression in both economies played an important part in economic adjustment by stabilizing domestic absorption and helping to bring about considerable depreciation of the real exchange rate. Lack of real wage flexibility, therefore, does not seem to have been a major problem in the adjustment of these two economies. In fact in the case of Morocco there is evidence to suggest that the real wage decline, through lowering of the growth of domestic final demand, has perhaps exerted a negative effect on the growth of a section of the industrial sector catering for the domestic market.

The adjustment process has led to a considerable growth of manufacturing exports in both countries. This, together with a substantial narrowing of the gap in external balance have been the major achievements of the adjustment policies in the two countries. The rapid growth of manufacturing exports, however, does not seem to have stimulated industrial investment during the adjustment period. In the case of Turkey, and with respect to the fertiliser exports of Morocco, the main source of export growth has been fuller utilization of capacities generated in the previous inward-oriented industrialization phase. In the case of the textiles and garment industry in Morocco too, export growth seems to have been based on increasing utilization of cheap casual female labour rather than the technological renovation and productivity growth in the sector.

The slow-down in the overall rate of growth of investment and the drastic fall in the share of investment in tradeable sectors such as manufacturing and agriculture during the adjustment period have been the main weaknesses of the adjustment process in both countries. Financial liberalization and high interest rate policy seems to have had a negative impact on investment in both countries without any positive effects on domestic savings.

The employment consequences of the adjustment process in both countries have been very much tied up with the investment performance. More reliable and readily available information in the case of Turkey suggests that despite substantial factor price changes towards relative cheapening of labour, the envisaged factor substitution towards higher labour intensity in the industrial sector did not materialized. In fact the output elasticity of employment during the adjustment period showed a decline. This has been explained by the low investment rate and lack of renovation of industrial capital stock.

Labour absorption in the agricultural sector in most countries in the MENA region crucially depends on the rate of investment in irrigation which makes possible the adoption of modern labour-intensive land-augmenting technologies. The cuts in government investment, reduction of agricultural input subsidies, and in the case of Turkey the substantial movement of the terms of trade against agriculture, has led to a decline in the rate of growth of investment in the agricultural sector and hence the ability of the sector to provide productive employment. An increase in the rate of surplus labour outflow from agriculture during the adjustment period, combined with the low investment rate in the industrial sector, meant that the share of the services sector in absorbing the labour force increased during the adjustment period despite a substantial deterioration of the terms of trade against the non-traded goods sectors. The slow-down in the rate of growth of labour productivity in the services sector in the case of Turkey, and in fact the negative growth of labour productivity in the case of Morocco, suggests that much of the new employment in services has taken the form of absorption of labour in low-productivity low-wage informal activities.

The resumption of investment growth in the MENA region economies as noted in Section 4 above, is an important precondition for an adequate rate of employment generation. To bring about a satisfactory rate of growth of private investment and in particular to direct such investment into long-term investment projects in traded goods sectors such as agriculture and industry, during a period of major structural adjustment and the uncertainties associated with it, is a formidable task. As the experience of Turkey and Morocco shows, under these circumstances reliance on the financial markets to guide the rate and structure of investment may be seriously at fault. A more active industrial policy, which at the same time guards against the repeat of the mistakes of the old inward-oriented industrialization strategy, may be necessary during the adjustment period for the generation and appropriate allocation of investment in the economy. Such industrial policy also needs to deal with the production inefficiencies which exist in the economies of the region. Without the improvement in productive efficiency of the existing industrial capital stock, an excessive burden may be exerted on labour and other sectors of the economy in the process of adjustment in order to improve the international competitiveness of the domestic industry. The case of Turkey presents a valuable example of this problem, where the real devaluation of the exchange rate (from the point of view of the manufacturing sector) has meant a deterioration in the agricultural terms of trade by more than 50 per cent and a decline in the share of wages in manufacturing value added by more than 20 per cent, part of which has no doubt taken place in compensation for lack of productive efficiency in the industrial sector. Excessive downward pressure on real wages in such situations is likely to lead to further productive inefficiencies in the economy. In the less industrialized economies in the MENA region, as in the case of Morocco, excessive downward pressure on real wages combined with other government expenditure cuts during the adjustment period can also adversely affect the growth of output and investment in the industrial sector through their demand side effects.

TABLES

	Population (Millions)	Per Capita GNP (US\$)	
	mid 1988	1988	
GROUP 1			
Low Absorption			
Oil Exporting			
Saudi Arabia	14.0	6200	
Kuwait	2	13400	
UAE	1.5	15770	
Bahrain	0.47	6340	
Qatar	0.41	9930	
Libya	4.2	5420	
Oman	1.4	5000	
GROUP 2 High absorption oil exporting			
<b>1</b>	49.6	2490(*)	
iran Isa a	40.0	2450()	
traq Alegnia	17.0	2360	
Algena	23.0	2000	
GROUP 3 Large Non-Oil Economies			
Turkov	53.8	1280	
Svria	11.6	1680	
Favot	50.2	660	
Sudan	23.8	480	
Morocco	24	830	
GROUP 4			
Small Non-Oil Economies			
Lebanon	2.7(-)	1406	
Israel	4.4	8650	
Jordan	3.9	1500	
S. Yemen	2.4	430	
N. Yemen	8.5	640	
Tuni <b>s</b> ia	7.8	1230	
Low income		320	
Middle Income		1930	
OECD		17470	

## Table A1: Population and Income in the Middle East and North Africa

Source: World Tables, World Bank

\* refers to 1990,

+ Refers to 1977,

- Refers to 1981

	SHARE TO TH	e of ex e midd	(PORTS )LE EAS	SHARE OF EXPORTS T TO INDUSTRIAL COUNTRIES
	1970	1980	1990	1970 1980 1990
GROUP 1				
Low Absorption				
Oil Exporting	3.2	6.4	9.4	78.1 72.3 59.3
	0.5			
Saudi Arabia	0.5	4.0	9.8	61.6 /5.4 66.4
	2.9	13.0	15.0	
Date	7.5	0.0	0.0	
Datiralli	0.7	20.0	20.0	33.9 23.0 25.4
Libya	0.4	3.0	0.4 2 G	
Oman	0.4	4.1	2.5	
oman	0.2	0.4	0.5	99.3 77.5 40.0
GROUP 2				
High absorption				
oil exporting	5.2	5.7	10.1	73.3 70.1 64.6
Iran	3.3	5.8	7.7	75.9 64.8 57.1
Iraq	12.1	8.6	18.6	61.4 59.1 56.7
Algeria	1.9	0.1	2.9	80.3 95.2 85.0
GROUP 3				
Large Non-Oil				
Economies	9.2	14.8	23.4	47.8 61.1 53.5
Turkey	9.7	22.6	2 <del>9</del> .1	70.5 56.6 57.7
Syria	30.2	8.0	21.7	39.4 67.1 34.4
Egypt	8.2	17.8	19.3	16.8 59.8 42.6
Sudan	8.9	29.2	24.9	47.4 39.5 39.3
Morocco	1.6	4.5	8.4	72.7 68.2 67.2
GROUP 4				
Small Non-Oil				
Economies	32.0	29.9	19.2	40.6 43.6 59.8
Lebanon	62.8	68.3	56.7	20.5 14.8 38.4
Israel	3.2	0.7	0.6	69.8 70.0 72.4
Jordan	62.7	53.2	33.5	0.2 4.0 7.6
S. Yemen	52.1	49.6	3.4	14.3 35.0 85.9
N. Yemen	6.9	35.3	26.6	43.5 30.8 54.6
Tunisia	15.1	5.4	11.5	66.4 68.9 76.4
MENA	5.8	7.0	11.3	69.4 70.4 60.6
EEC	5.2	9.1	5.2	70.6 72.7 81.6
INDUSTIAL	4.7	8.4	4.6	67.5 67.5 75.7
DEVELOPING	3.0	5.8	5.2	68.4 63.6 60.4
WORLD	4.6	7.7	4.9	69.8 67.7 72.7

Table A2: Trade Flows in the Middle East and North Africa

Source: Direction of Trade Statistics, IMF

	1970	1975	1980	1985	1989	1990
Remittances, received	(US\$, BoP)					
Algeria	211	412	406	313	345	352
Egypt, Arab Rep.	29	366	2696	3496	3532	3743
Iran, Islamic Rep.						
Jordan	0	167	715	1021	623	500
Morocco	63	533	1054	967	1336	2006
Sudan	0	6	209	430	297	188
Syrian Arab Rep.	7	52	773	350	395	375
Tunisia	29	144	319	271	488	599
Turkey	273	1312	2071	1714	3040	3246
Yemen, Rep.					410	1366
Remittances as % of Mer	chandise Expor	ts				
Algeria	21	9	3	2	4	3
Egypt, Arab Rep.	4	20	70	89	121	119
Iran, Islamic Rep.						
Jordan		109	124	129	56	47
Morocco	13	35	44	45	40	48
Sudan		1	35	72	54	42
Syrian Arab Rep.	4	6	37	19	13	9
Tunisia	15	18	15	16	17	17
Turkey	46	94	71	21	26	25
Yemen, Rep.					31	106
Remittances as percentag	e of imports of	goods and	l services			
Algeria	14	6	3	2	3	3
Egypt, Arab Rep.	2	7	28	25	24	23
Iran, Islamic Rep.						
Jordan		18	22	26	17	12
Morocco	7	17	18	19	18	23
Sudan	0	1	12	23	13	9
Syrian Arab Rep.	2	3	17	7	12	10
Tunisia	7	9	8	8	9	9
Turkey	24	26	22	12	14	11
Yemen, Rep.					14	57

# Table A3: Workers Remittances Received

Source: World Tables, World Bank

	GDP		AGRICULTUF	Æ	INDUSTRTY		MANUFACT		SERVICES	
	1965-80	1980-91	1965-80	1980-91	1965-80	1980-91	1965-80	1980-91	1965-80	1980-91
	5	25	0.6	4,1	5.1	1.5	9.1	2.4	7.7	2.9
Algeria Less felomio Bon	10.5	6 C	4 1	3.9	13.4	-3.1	14.0	1.0	13.2	-1.3
Iran, Islamic nep. Iraq	6.3	-0.8	1.2	3.8	6.0	0.8	10.1	1.2	10.0	0.2
	۲ ۲	4 8	7 0	2.4	6.9	4.2			13.7	6.2
Egypt, Arab hep.	2 F	C 1	4.5	89	6.1	3.0	5.9	4.2	7.1	4.2
		4. C	i u	-0 e	12.0	6.8	2.3	1.6	10.5	1.6
Syrian Arab nep. Turkey	6.2	3.9	3.2	2.8	7.2	4.2	7.5	4.7	7.6	4.3
		5 5 5	68	3.5	20.4	0.8	13.4	0.0	5.5	3.1
Jordan Tunisia	9.9 9.9	3.7	5.5	3.1	7.4	2.9	6.6 6	5.8	6.4	4.3
	7 9	2.1	4.3	3.6	6.3	6.0	:	3.4	10.9	1.9
MENA region S.:t Sthered Africa	4 2		2.0	1.8	7.2	2.0	ł	3.1	4.7	2.5
Sub Salalari Anica East Asia and Pacific	7.3	7.7	3.2	4.3	10.8	9.4	10.3	12.4	8.9	8.0
Cast Asia and Facino South Asia	3.6	5.4	2.5	3.3	4.3	6.4	4.5	6.8	4.5	6.3
Latin America	6.0	1.7	3.1	1.9	6.6	1.4	8.3	1.7	6.6	1.7

Notes: Growth rates for Iraq refer to 1965-80 and 1980-89, and for Jordan refer to 1970-80 and 1980-87. Growth rates of manufacturing for broad regions refer to 1965-80 and 1980-90. Growth rates for Iran and Turkey refer to 1965-77 and 1977-90 Source: UN, MEDS for Jordan, and World Bank, World Tables for the rest.

Table A4: GROWTH OF GDP AND ITS SECTORS

	Share of Lab	our Force 1	965	Share of Lab	our Force 1	980	Annual Gro	wth of Labo	ur Force
	Agriculture	Industry	SERVICES	Agriculture	Industry	SERVICES	1965-80	1980-85	1985-2000
Algeria	57	17	26	31	27	42	2.2	3.6	3.7
Iran, Islamic Rep.	49	26	25	36	33	31	3.2	3.3	3.2
Iraq	50	20	30	30	22	48	3.6	3.7	4
Egypt, Arab Rep.	55	15	30	46	20	34	2.2	2.6	2.7
Morocco	61	15	24	46	25	29	2.9	3.3	3.1
Syrian Arab Rep.	52	20	28	32	32	36	3.3	3.5	4
Turkey	75	11	14	58	17	25	1.7	2.3	7
Jordan	37	26	37	10	26	64	1.7	4.4	4.2
Tunisia	49	21	29	35	36	29	2.8	3.1	2.8
MENA Region	60	16	24	45	23	32	2.4	2.9	2.8
<sup>2</sup> Low-and middle-income economies	65	12	23	55	16	29	2.4	2.6	2.5
<sup>2</sup> Low-income economies	77	6	14	72	13	15	2.1	2.3	1.9
<sup>2</sup> Middle-income economies	56	17	27	43	23	34	2.6	2.3	2.3
Industrial Market Economies	14	38	48	7	35	58	1.3	-	0.5
Sub-Saharan Africa	79	ø	13	75	<b>0</b>	16	2.5	2.4	2.7

Notes: MENA region figures are weighted averages of the countries in the Table Source: World Bank, World Development Report, 1987, Table 32, p.264.

Table A5: Structure and Growth of Labour Force

UDE LABOUR FORCE PARTICIPATION
CRI
<b>AND</b>
GROWTH
POPULATION
Table A6:

	Annual Rati	e of Population Growth									
							Labour Force Particip	ation Rate			
	197(	0-80	1980-	00		Male	•		Female		
	Total	Urban	Total	Urban	1970	1980	1990	1970	1980	1990	
Algeria	3.1	4.0	2.9	4.6	37.5	35.4	36.2	2.5	5	4 4	
Iran, Islamic Rep.	3.1	5.0	4.7	3.4	43.6	41.5	41.0	7.6	0 0 0 0		
Iraq	3.5	5.2	3.5	4.3	43.9	34.8	32.8	3.4	10.0	12.0	
Egypt, Arab Rep.	2.1	2.5	2.5	3.1	47.9	45.2	44 R	07	0	r 4	
Morocco	2.4	4.1	2.6	4.1	38.9	40.3	42.9	, 4 1	0 <sup>0</sup> <sup>0</sup>		
Syrian Arab Rep.	3.4	4.2	9.0	4.3	37.7	2.05	2.41	t c	0, , 2, r	13.2	
Turbay		0					1.10	0.0	4./	<u>8</u> .6	
A sub-	6.4	0.0	2.3	<b>b.</b> /	52.9	51.2	52.5	35.0	30.5	30.0	
Jordan	4.5	6.2	3.8	5.0	43.3	35.2	35.3	3.3	3.6	4 9	
Tunisia	2.2	4.0	2.5	2.9	40.4	38.4	41.1	6.0	12.6	16.2	
AENA region	2.7	4.4	2.8	4.5	45.6	43.6	43.4	12.0	12.2	13.1	

Source: Social Indicators, World Bank, and AGROSTAT, FAO.

	1970-80	1980-90	
Algeria	10.7	-0.1	
Iran, Islamic Rep.	17.6	-7.9	
Iraq	18.9	-4.0	
Egypt, Arab Rep.	16.8	2.7	
Morocco	7.0	3.7	
Syrian Arab Rep.	9.8	-5.9	
Turkey	10.5	1.4	
Jordan	14.1	-2.0	
Tunisia	9.2	0.7	

Table A7: Average Anni	al Growth of Investment	in Selected MENA	Countries
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Notes: Growth rates for Iran and Turkey refer to 1970-77 and 1977-90,

for Jordan and Iraq to 1970-80 and 1980-77. The data is for fixed investment except for Jordan and Iraq which include change in stock as well. Source: UN, MEDS for Jordan and Iraq, World Bank, World Tables for the rest.

	Total	Female	
Algeria	43	55	
Iran Islamic Ben	46	53	
Iroa	40	57	
iiay	40	51	
Egypt, Arab Rep.	52	66	ĸ
Morocco	51	62	
Syrian Arab Rep.	36	49	
Turkey	19	29	
Jordan	20	30	
Tunisia	35	44	
MENA	47	60	
Low Income	40	52	
Middle Income	22	27	
lower	25	32	
Upper	16	19	
tow and Middle Income	36	15	
	JU JU Deale 100		

*Table A8: Adult Illiteracy in Selected MENA region Countries, 1990* (per cent)

Source: World Development Report, World Bank, 1993


Figure 1, Value of Oil Exports from the MENA Region



Figure 2: GNP and Per Capita Consumption in the MENA region



Figure 2: Continued...

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Figure 3: Continued .....

				and the second	
	1970-80	1980-85	1970-85	1985-90	
Agriculture	3.0	2.7	2.9	2.0	
Industry	8.5	5.8	7.6	2.3	
Services	11.8	9.4	11.0	3.5	
GDP	8.7	6.9	8.1	2.9	
investment	13.3	8.1	11.5	-5.8	
Private Consumption(1)	8.8	4.7	6.9	1.8	
Public Consumption(1)	4.4	7.7	5.9	0.8	
Exports(2)	6.9	1.5	5.1	5.0	
imports(2)	8.5	1.8	6.2	-4.7	

# Table E1: Annual Growth of GDP and its Components, Egypt, 1970-90

Notes: 1- Consumption growth rates in columns 1 and 3 refer to 1974-80 and 1974-85 periods respectively. 2- Goods and non-factor services

Source: World Bank, World Tables

	1970	1971	1972	1973	1874	1975	1976	1977	1978	1979 1	180 11	961 11	982 19	63 19	94 18	36 196	1867	1968	1969	1990
AGR TOT(1) IND TOT(2)	100.0 100.0	102.2 100.7	106.3 99.7	110.0 100.7	120.4	119.1 119.5	125.0	137.0 1 105.3 1	133.5	34.6	10.6 12 34.3 13	24.6 13 38.4 13	0.6 0.3 12	<b>5.4</b> 144 0.6 114	1.7 145 1.3 110	.4 153 .5 102.	.0 149.4 .6 110.7	146.2 115.7	138.6 115.9	136.4 112.4
AGR / IND TOT(3)	100.0	101.6	106.7	109.3	102.3	99.7	113.1	1 1:00:1	127.2	87.7	82.4 9	90.0	0.2 11	3.1 120	3.5 135	2 149.	.1 135.0	126.4	119.6	121.4
GDP deliator Consumer Price Index External Terms of Trade	100.0 100.0 100.0	101.7 103.1 94.4	103.7 105.3 89.6	110.8 110.7 87.2	121.6 121.8 105.7	132.8 133.6 97.1	148.3 147.3 100.8	162.7 166.1 97.4	177.4 2 184.5 2 80.9	213.3 202.8 83.1 1	49.9 26 44.7 26 12.2 12	52.3 21 39.9 30 22.4 11	7.6 11	5.4 321 9.8 421 4.7 111	8.4 355 1.0 472 1.1 942	584 584 584 584 584 584	.7 699.8 .7 699.8 .6 71.7	7 539.1 3 823.4 7 69.7	629.3 998.5 58.6	738.5 1165.8 54.8
Rate of Inflation GDP dilator Consumer Price Index		1.7 3.1	1.9 2.1	6.8 5.1	9.8 10.0	9.2	11.7 10.3	9.7 12.7	9.0 1.11	20.2 9.9	17.2 20.7 1	1.0	8.4 4.8	B.0 1. B.1 13	1.2 8	12 12	8 9 19.1	1 16.0 7 17.7	16.7 21.3	17.3 16.8
Real Exchange Rate				100.0	94.5 5	0'.7 <b>6</b>	107.3	111.6	108.5	67.9	61.0 7	70.7 B	14.B 10	1.2 12	1.3 137	.8 146	3 155.5	5 171.3		
Real Wages			.'											•	3 8.1	2.1				
Agriculture Public Sector Private Sector				100.0 100.0	105.0 110.0	67.0 130.0	84.0 155.0	114.0	82.0 180.0 2	79.0 200.0 2	77.0 E	81.0 t	35.0 E 18.0 28	4.0 8.0 32	B.0 111 1.0 326	3.0 1.0 290	.0 77.0	0.0		
Manufacturing Public Sector Private Sector				100.0 100.0	97.0 0.111	89.0 108.0	93.0 116.0	98.0 136.0	0.001	109.0	08.0 36.0 14	16.0 15 45.0 15	23.0 11 3.0 16	7.0 12 1.0	0.0 10t	101 101	.0. .0.96.0	00		
Construction Public Sector Private Sector				100.0	111.0 127.0	100.0 148.0	104.0 162.0	171.0	118.0	139.0 1	26.0 15 56.0 15	20.0	15.0 13 15.0 13	0.0 2.0 13:	0.0 2.0 134	1.0 120 1.0 132	.0 110.0			
Services Public Sector Private Sector				100.0 100.0	117.0 100.0	0.98 0.98	89.0 103.0	95.0 106.0	118.0 1	101.0 134.0 1	96.0 §	89.0 1( 26.0 12	30.0 16.0 12	4.0 0.4 0.4 0.4	6.0 9; 2.0 157	3.0 82 7.0 126	.0 74.0 .0 107.0	00		
Blue Colour Public Sector Private Sector				100.0 100.0	101.0 92.0	94.0 90.0	97.0 102.0	108.0	104.0	114.0 1 129.0 1	13.0 12 23.0 12	21.0 1: 27.0 1:	27.0 12 29.0 13	3.0 12	8.0 12' 7.0 141	1.0 108	.0 99.0	00		
White Colour Public Sector Private Sector				100.0 100.0	104.0 92.0	88.0 88.0	86.0 87.0	91.0 94.0	106.0 98.0 1	97.0 115.0 1	91.0 08.0	92.0 38.0 10	92.0 8 )8.0 10	8.0 8.0 11	2.0 84 5.0 123	1.0 74 3.0 103	0.0	00		
Public Enterprises Private Enterprises Government				100.0 100.0 100.0	103.0 103.0 87.0	92.0 82.0 83.0	94.0 89.0 84.0	102.0 103.0 87.0	107.0 100.0 83.0	110.0 117.0 82.0	107.0 11 12.0 11 80.0 E	12.0 11 15.0 11 16.0 11	11 11 17.0 12 17.0 7	1.0 11 1.0 13 8.0 77	6.0 2.0 7.0 71	8.0 98 1.0 115 1.0 60	.0 90.0	000		
Notes: 1 Agricultural Terms of	Trade, Agr G	DP deflator d	ivided by ove	srall GDP def	flator. 2. Inc	lustrial Terms	s of Trade, di	efined as in 1	. 3- Industi	ry-Agriculture	e terms of tra	de defined e	e in 1.		-					

Table E2: Relative Prices, Wages, Interest Rates and the Exchange Rate in Egypt

Sources: World Bank World Tebles, Assaud and Commander, 1989.

	1970	1973	1975	1977	197 <b>9</b>	1981	1983	1985	1987	1989	1990
Government Deficit		10.1	28.6	16.9	26.9	25. <b>3</b>	23.1	22.8	19.3	18.3	16.5
Gross Dom. Savings	9.4	8.0	12.3	18.5	14.2	14.1	17.8	14.5	6.6	57	4.8
Gross Dom. Invest.	13.9	13.1	33.4	29.2	32.8	29.5	28.7	26.7	18.0	23.3	21.9
Resource Balance(2)	-4.6	-5.2	-21.1	-10.7	-18.6	-15.4	-10.9	-12.1	-11.4	-17.5	-17.1
Current Account Deficit	5.9	5.8	21.2	9.9	10.6	9.1	5.4	9.3	5.2	8.1	7.2
Foreign Debt (\$ billion)	1.6	2.1	4.4	12.7	16.4	23.9	32.5	41.8	50.8	51.2	<b>39</b> .9

 Table E3: Government Deficitt, Resource Balance and Foreign Debt in Egypt, 1970-90

 (per cent of GDP)

Sources: World Bank, World Tables, Assaad and Commander 1990, and World Bank 1992.



Figure E1: Real Wage Trends by Economic Sector in Egypt, 1973-87

Figure E2: Employment and Real Value Added in Egypt's Manufacturing Sector, 1964-90



					No. of Concession, Name of			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												
Sector	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	<b>19</b> 90
Agriculture ndustry Construction	10.0 7.7 19.0	2.2 6.2 6.2	-9.3 6.0 11.0	2.1 6.6 0.0	-6.3 10.5 117.0	15.3 9.3 21.0	-12.3 8.0 -1.0	18.0 -0.9 -20.0	-1.7 7.7 -3.0	14.0 -1.3 -9.0	-28.6 2.6 -2.0	35.0 2.8 12.0	-10.4 1.3 -5.0	3.7 -5.0	18.4 5.8 6.0	36.7 0.9 -10.0	-23.6 1.6 0.0	31.4 8.2 10.0	2.6	-6.8 7.4
bervices 3DP	1.6 5.6	2.3	8.5 3.5	5 0 0	9.5 6.5	10.8 10.6	9.4 7.5	1.2	4.4 1.4	16.1 8.9	2.6 -3.7	8.2 10.3	1.1 -0.5	6.2 4.7	3.3 5.1	3.6 9.7	3.8 -2.4	5.2 9.5	3.6 0.7	3.6 4.2
xpenditure																				
Consumption Private	3.0	3.9	5.1	4.5	5.3	9.7	3.1	7.0	5.7	6.7	4	5.9	8.0-	3.5	2.9	9.7	-0.7	7.6	5.1	0.6
Public nvestment Private	5.9 10.7	0.6 -18.9	3.7	12.4	38.8 65.6	44.7 17.4	2.9 15.5	7.0 -25.9	8.2 1.3	-3.7 4.6	5.0 0.3	8.7 16.4	-2.2 -17.0	5.1 7.3	15.3 5.7	13.3 4.2	6.9 8.3	8.5	-0.6 12.8	8.0 8.2
Public xports (share of manufactures)	-0.4 (9.7)	18.4 (14.8)	14.8 (14.3)	-3.3 (14.8)	-17.4 (11.3)	7.0 (12.5)	9.2 (16.1)	6.0 (21.0)	0.5 (22.8)	3.6 (23.5)	0.2 (23.5)	4.9 (28.2)	8.1 (34.3)	2.8 (38.7)	4.2 (40.8)	2.2 (40.5)	10.1 (43.5)	18.6 (48.7)	-13.6 (49.9)	21.6 (46.5)
nports	-2.7	2.0	20.1	4.8	30.5	21.7	12.4	-12.9	3.3	-7.9	1.9	3.1	-11.3	4.3	0.0	7.7	7.9	6.5	4.7	14.1
ource: World Bank, World Tabi	les, construi	ction sector	data based c	In Aloui and I	Dethier (1990															

Table M1: Annual Growth of GDP and its Components, Morocco, 1971-90

Internal Terms of Trade Antoutlura	1970	1971	1972	t/61	1974	1975	1976	1977	1978	<b>979</b>	1980	1981	1982	1983	1984	1985	1986 1		986 1	989
Internal Terms of Trade Annoutlura			5	3	2					1	}	2	2	;			° N	3	?	
	7 7 F				5	9	\$	8	8		8	4	-	80	8	7 96	04.0	Y2		84.7
Industry	2	83 8	816	808	88	95 B	1 16	88.6	68 6	897	939	080	97 B	1000	102 9	103 7	107 I I	049 10	083 1	106 1
Manufacturing											96 2	8	987	100 0	100 3	100	98 7	99 <b>4</b>	995 IL	8
AGR / ND	8 I 6	97 5	102 0	115.1	94.4	94 B	106.4	6111	1126	1122	105 5	96 5	931	1000	¥0 0	5	000	0/0	2	/0 0
Interest Rates					, ,	,	, ,	•	•	,			5	5				50	5	
Agriculture					0 0 0 0	50	5 G 5 C	5 a 0 0	5 0	5 0	500	50	50		10	150	140	140	120	
Industry					10		Ē		č	200	200	140		50	1.0	i	100		20	
Agriculture					<u></u>	2	00	4	-1.2	02	60	·2.5	-0.5	38	00	6.3	5.3	10.3	9.6	
Industry					.8 6	2.1	۲5	-2.6	03	17	06	-0 S	15	68	00	7.3	73	11.3	10 6	
Prices																				
GDP Deficitor	36 <b>8</b>	38.3	39.7	421	52.4	S3 2	540	62.5	673	724	79.2	86 9	932	1000	108.8	0.011	1307	354	424	48 2 1
ĉ	<b>33 4</b>	34 B	1 %	37 6	44 2	47.7	517	58.2	6.9	69.2	757	85.2	94 2	1000	1124	1211	131.7	35.3	385 1.	42 8
External Terms of Trade	148 5	144.9	143 2	128.5	154.8	100.0	128.6	122.3	121 6	120.3	1140	1 60	104.4	1000	102.4	101.1	1176 1	14.6 1.	169	6 I 6
Exchange Rate			63.4	170.0	141 4	174 3	140 7	5	144 5	181.0	179.6	1371	1174	Imo	804	70.2	77 5	844	800	83 2
Effective Nominal Rate	ł	ł.	ž		2			ļ		101	HI-5	103		1000	92.4	87 5	810	805	829 4	89.5
Real Effective Rate	118.3	1192	1199	129.5	126 1	131.5	127.7	135 6	138.9	136 8	119.3	109.4	107.5	100.0	94 1	87.7	83.8	80.9	79 2	793
Money Woges							100	450	430	450	480	80	790	080	790	870	83 0	70 O 67	930	
Institud Labour (min DH / Vi)	2						0	6	80	80	9.0	100	10	120	100	120	120	140	140	
Minimum Woge Index	264	29.6	29 6	29.6	35 4	39.1	39.1	43.0	430	559	8	72.3	83.4	1000	100 0	1100	110.0 1	100 1:	20.8	
Public Sector Wage Index	42.6	489	48 9	48.9	60.0	84	84	728	728	80 O	84 <b>3</b>	94.9	94 9	1000	1000	109.8	109.8	109 8	098	
Real Wages Manufacturing Real Wag							100 2	103.2	1081	107.4	105 5	101.1	98 6	100 0	86.0	91.7	805	83.8		
Skilled Labour							110.9	113.6	990	956	93 2	113.9	123.4	1000	103 3	105.6	92.7	85.9	98.8	
Unskilled Labour	\$	2	2	1	5	•	× 8	85.9	104.3 1	5 8 5	70 A	97. <b>8</b>	97. <b>4</b> 94 A	1000	74.1 RA Q	90 A	75.9 87.5	86.2	84.2	
Minimum Wage Public Sector Wage	127.4	140.7	BI.Y	130.2	1358	139.3	1284	125.0	113.9	115.6	111.3		100.8	1000	88.9	86	83.3	81 2	79.3	
Annual Growth Rates		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 1	1 986	1 6961
Internal Terms of Trade		•						2	2		•		<b>.</b>		1	0.7	- C - 1	10		5
Apriculture		500	 -	5	31A	1 i 0	- 0 0		07	- 08	47	A A A U	54	2 9 <del>6</del>	29		نه در در در		ن دن ده د	200
industry Mona Apphalian		Ċ		÷	5 C J	i C	į	ŝ	6	ī		ن د ۵	0 d	::	03	6 G	 	9 !	23	30
AGR / ND		62	4.0	12.9	-17.9	0.4	121	5.2	0.7	-0,4	÷0	-8.5	35	7.4	:3 A	÷15	-12.2	51	- <b>8</b> .7	45
Prices GDP deflorior		40	4	6.2	24.4	-5		15.7	1.1	7.6	9.5	9.7	7.2	7.3	88	8.5	10.8	3.6	52	40
		42	3.8	<b>t</b>	17.6	7.9	8.5	12.6	9.7	8.3	9.4	12 <b>5</b>	10 5	62	124	1.1	8.7	27	24	3.1
External Terms of Stade		-24	-12	-103	20.5	76	-22 <b>8</b>	-4.9	-0.5	-1.1	-52	43	43	42	24	-1.3	16.3	-2.5	21	21.4
Exchange Rate		2	2	1.1	5	70	- A -	- 0	<b>R</b> 3	A 7	5		- 14 4	-148	- 19 6	.127	105	BQ	0	یہ م
Shortha Data		0	4.0	14.3	ć		ŝ		;	5		., i 5		ن - د	-76	5 i	-7.A	6 6	30	7.9
Real Effective Exchange Rate	•	07	06	80	·2.6	43	-29	6.2	2.4	15	-128	-8 J	-1.8	<b>6</b> 9	-5 9 5	ò i B	÷.	ن د 5 5	21	2
Red Woges																				
Manufacturing								30	4.8	-0.7	-1.7	42	-2.5	-5	-134	5.9	-121	4		
Sulled								25	-129	ن ر ه	2 Å2 5 5	22 2	83	061		22	-123	.7.3	150	
Unskilled		16		•	-	د د		-11-2	21.5	2	2.8	-1.2	50	170	9 C2.4	ت ت ه	ġ	34	-23	
Auranum woya Buhir Sarin Wona			ن ن م	4 4 0 4	4.3	25	-7.8	26	69 ( 10	5	5	29	io 1 5 i		Ē			26	2 . 2	
And and a second																				

Source: World Bank, World Tables, IFS, IMF, and Aloui and Detheir (1990)

Table M2: Relative Prices, Real Wages, and Real Exchange Rate in Morocco, 1970-1990

Foreign Debt (\$ billion) Notes:	Current Account Delici	Gross Dorn. Savings Gross Dorn. Invest. Resource Balance	Revenues Current Expenditures Savings Capital Expenditures Budget Deficit	(per cent of GDP) Government Budget	Table M3: Govern
(0.7)	-4,1	145 -3.9	19.3 16.6 5.8 3.1	1970	ment Budget
(0.9)	-2.2	15.2 17.9 -2.8	17.7 1.9 4.9 3.0	1971	Resource
16.9 (0.9)	0.3	14.6 15.3 -0.7	18.6 17.3 5.1 3.8	1972	Balance
14.5 (1.2)	1.0	15.6 16.9 -1.3	201 30 51	1973	and For
12.8 (1.0)	2.5	-0.6 20.6	25.2 22.6 5.6 40	1974	alon Dehi
20.2 (1.8)	-6.3	14.3 25.2 -10.9	26.2 22.1 3.9 13.3 -9.2	1975	Postio In
25.8 (2.5)	-15.1	8.7 28.1 -19.4	23.4 21.4 1.6 19.6	1976	Morrocco
37.5 (4.9)	-16.9	13.8 34.2 -20.4	24.8 20.3 19.9 15.4	1977	1070.0
<b>39.8</b> (6.2)	-10.5	11.7 25.4 -13.7	24 2 20.7 3.2 14.0	1978	5
39.8 (8.5)	<b>-9</b> .8	11.6 24.5 -12.9	25.5 21.6 3.5 13.6	1979	
59.9 (9.7)	-8. 1	13.7 24.2 -10.5	23.6 22.8 0.5 10.5 9.7	0861	
74.3 (10.6)	-12.7	11.5 26.1 -14.6	25.8 26.3 12.9 13.4	1981	
86.3 (12.4)	-13.2	13.8 28.2 -14.5	26.3 24.7 1.3 13.0 -11.4	1982	
118.6 (13.2)	-7.1	15.2 24.0 -8.8	24.7 24.4 0.0 8.1	1983	
127.0 (14.0)	-8 5	14.7 25.3 10.6	23.8 0.2 6.5	1984	
134.7 (16.3)	-7.8	16.1 25.0 -9.0	23.3 24.5 -1.4 -7.3	1985	
122.1 (18.8)	-2.2	16.5 22.8	21.3 22.1 -0.9 -7.7	1986	
115.5 (20.7)	-	16.7 21.1 -4.4	23.7 1.5 6.1 4.5	1987	
(20 <b>5</b> )	0.7	20.6 21.1 -0.5		1988	
(21.6)	-4.7	18.5 24.0 -5.5		1989	
91.0 (23.5)	21	19.6 25 7 -6 1	ن 4 556	1990	

Nates: Sources: World Bank, World Tables

	* :	Share of	GDP		Avera	ye Annual	Growth Rates
Sector	1960	<u>1970</u>	<u>1983</u>	<u>1990</u>	1960-70	<u>1970-82</u>	1982-90
Agriculture Industry Manufact.	23.0 27.0 16.0	20.0 27.0 16.2	15.2 33.2 18.4	15.7 33.0 18.2	4.7 4.2 4.2	1.5 5.24	4.6 2.9 3.8
Services GDP	50.0 100.0	53.0 100.0	51.6 100.0	51.3 100.0	$\begin{array}{c} 4.4\\ 4.4 \end{array}$	6.4 5.0	3.7 3.6
Expenditure							
Consumption Private Public Investment Private	89.0 77.0 12.0 10.0	85.4 73.4 12.0 18.5	85.9 68.1 17.8 24.0	80.5 64.6 15.9 25.7	4.2 4.1 4.4 8.8	5.8 4.5 9.7 6.9	3.6 3.4 4.1 2.2
Public Exports	24.0 (8.8)	17.6 (9.7)	21.5 (38.7)	25.0 (46.5)	2.5** (1.1)	3.2 (10.2)	6.1 (3.8)
(Manufact.) *							
Imports		21.5	30.3	31.1	3.4	4.5	3.4

Table M4: GDP and its Growth by Sector and Expenditure Group in Morocco, 1960-91

Notes: \* Share of \$ value of manufactured exports in total exports. Growth rates refer to annual growth of shares. The 1960 figure refers to 1961. \*\* Merchandise Exports.

Source: World Bank, World Tables

## Table M5: Input Use in the Agricultural Sector in Morocco. 1970-89

	1970	1980	1989	1970-80	1980-89
% Irrigated Land (1)	13.0	16.2	14.6	2.2	-1.1
Fertilizer Use (2)	12.4	34.4	36.7	10.2	0.7
Tractors in Use (3)	17.0	34.5	40.4	7.1	1.7
Labour / Land Ratio (4)	33.0	34.3	32.4	0.4	-0.6
Labour/ Irrigated Land Ratio (5)	253.6	212.5	221. <b>8</b>	-1.8	0.5

Notes: 1- Per cent of irrigated land in total arable land. 2- Kg per HA of arable land.

3- Tractors per hundred HA of arable land.
4- Agricultural labourer per hundred HA of arable
5- Agricultural labourer per hundred HA of irrigated land.

Source: Agrostat, FAO

## Table M6: Output Elasticity of Employment by Sector in Morocco, 1982-86

Sector	1982-86	
Agriculture	1.41	
Industry	1.57	
Construction	1.11	
Services	3.88	
Commerce	2.59	
Transport & Communications	0.47	
Other Services	6.84	
Public Administration	-0.71	
Total	1.99	
Notes: 1- Percentage growth of emplo	yment over percentage growth of vo	alue added
Source: Montoliu(1989), Table III.12		

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				Annual				Annual			Share of Increase		
		Output 1980	001=(	Growth	ت	mployment (	(000	Growth	Share of Emp	oloyment	in Employment	Wage Rate	
	Sector	1983	1988	1983-88	ISIC	1983	1988	1983-88	1983	1988	1983-88	1983	
211/12	Food Products	102.0	92.0	-2.1	311/2	18.1	27.4	8.2	8.8	7.7	6.2	24.5	
102	Taxtilat	113.0	147.0	5.3	321	43.8	63.8	7.5	21.2	0.81	134	13.2	
5				1	322	16.4	52.4	23.2	7.9	14.7	24.2	9.8	
323/24	Leather and Products	114.0	66.0	6 <sup>-</sup> 10.9	323/24	9.1	14.8	9.8	4.4	4.2	3.9	15.9	
157	Wood Products	0.19	90.06	-0.2	331/32	9.4	1.11	3.4	4.5	3.1	1.2	17.2	
34)	Paper and Products	98.0	0.66	0.2	341/342	9.6	12.1	4.7	4.6	3.4	1.7	25.8	
351	Industrial Chemicals	162.0	134.0	-3.8	351/352	14.1	23.2	9.9	6.8	6.5	6.1	38.3	
352	Other Chemical Products	116.0	113.0	-0.5								•	
353	Petrotuem Refineries	107.0	81.0	-5.6									
355	Rubber Products	67.0	80.0	3.5	355/56	6.9	10.6	8.8	3.3	3.0	2.5	25.8	
356	Plastic Products, n.e.c.	0.77	122.0	9.2									
362	Glass and Products	80.0	104.0	5.2	361/62/69	17.6	25.5	7.4	8.5	7.2	5.3	23.0	
371	tron and Steel	0.19	259.0	20.9	371/72	1.5	2.4	9.7	0.7	0.7	0.6	25.7	
341	Matol Products	0.66	116.0	3.2	381	15.4	18.3	3.5	7.5	5.2	2.0	26.5	
	Mochinery D. 6. C				382	3.8	5.9	8.6	1.9	1.7	1.4	24.7	
	Electrical Machinery	93.0	0.06	-0.7	383	7.5	10.5	6.7	3.6	3.0	2.0	29.1	
	tracende recentory	0.06	157.0	1.1	384	<b>6</b> .3	8.4	5.6	3.1	2.4	1.4	31.9	
5	Manufacturing	110.0	135.0	4.1	•	206.4	355.1	10.9	100.0	100.0	100.0	21.7	
)													

Notes: • Establishments with more than 10 employees Source: UN, Industrial Statistics Yearbook, 1985, 1992

Sector	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture Industry Manufacture Services GDP	13.3 5.0 9.5 9.5	-1.6 6.0 10.6 6.0	-10.2 10.7 6.8 3.9	10.5 7.7 6.9 8.8 8.8	10.9 8.8 2.9 8.8	6.00.00 9.00 9.00 9.00 9.00 9.00 9.00 9.	-1.2 8.9 5.2 5.1	2.6 3.3.3.6 4.8 4.4	2.8 5.2 0.1	4.4. 4.4. 1.1 0.6	0.0 9.2 3.7	6 6 7 7 8 8 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9	0.0 8.8 0.3 0.0 0.0	3.5 8.5 5.7 6.2	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	8.8 9.7 6.0 7.3	2.2 9.9 9.0 7.2 8.7	8.3 2.2 4.5 4.5	-11.1 3.0 3.9 0.8	11.8 5.8 8.0 8.2 8.2
Expenditure																				
Private Consumption Public Consumption	12.9 19.6	10.2 -10.4	0.6 4.3	8.2 7.0	5.1 12.0	9.3 6.3	4.4 7.5	6.6 8.6	-1.9 1.6	-5.2 8.8	-1.5 -0.4	4.3 1.1	6.4 2.8	10.3 0.0	1.5 3.1	10.4 6.6	6.9 5.0	1.9 2.7	4.0 0.3	14.9 11.9
Fixed Investment	-3.B	11.4	17.6	13.0	21.B	12.6	6.9	6.6-	-3.6	-10.0	2.1	3.3	2.7	0.2	16.8	11.0	5.5	-1.6	-3.3	8.6
Exports Share of Manufactured	7.2 12.3	29.7 14.0	15.6 16.8	-17.1 21.9	2.2 23.3	21.3 23.8	-17.5 24.6	13.8 21.9	-9.3 27.4	4.1 26.9	85.1 37.2	40.1 43.1	13.7 46.6	19.8 54.0	12.3 61.2	-1.5 58.4	27.3 66.3	19.7 64.3	4.7 65.9	10.3 67.9
Exports in total Imports	19.4	23.4	0.0	16.1	11.9	7.9	4.2	-33.5	<b>-6.</b> B	2.4	15.0	7.5	17.2	27.7	8.1	11.4	18.7	6.0	6.5	35.3

Table T1: Annual Growth of GDP and its Components, Turkey, 1971-90

Source: World Bank, World Tables

Table T2:	Relati	ve pri	ces, 1	eal w	ages,	and re	al exc	hange	rates	in Tui	ckey,	1970-1	066							
	0291	1291	1972	6791	1974	1975	1976	1977	1978	1 6/6	080	081 I	08.0	L L L L L L L L L L L L L L L L L L L	780	85 10	801 Y8	, 10a	1080	0001
internal Terms of Trade												•		3	5	2	8			1441
Agriculture	100.0	96.8	9.66	112.4	114.8	114.7	118.2	1194	111.6	98.3	94.9	95.6	38.8	2.1 9	0.5 B	65 A:	8.6 A5	A 70 F	86.6	100
Industry	0001	101.5	97.4	92.8	945	92.3	88.4	89.6	9.5	04.5	14.6 1	146 1	11 081	00	15 12	40 12		E PCI E	7.811	1115
Manufacturing	1000	103.3	98.4	96.7	100.3	<u>9</u> 6.1	91.5	010	1 6.601	21.9 1	33.6 1	30.2	13 2 13	57 13	13			- 13VU	0.001	
AGR / IND	0001	953	102.3	121.1	121.4	124.3	133.7	1332	1121	94.1	82.8	B3.4	152	2.6 7	45	80	20		700	204
interest Rates														2	) ) ,	5	2			
Nominal	0.9	0.0	9.0	8.8	0.6	0.6	0.0	0.0	10.01	10.8	56.0	31.5	1.5 4	8.5 5	2.0 4	2.0 44	10 45	0 540	540	45.0
Reci		6.7	-2.7	-6.7	<b>8</b> .0-	-10.2	-8.4	-18.1	-35.3	47.9 -1	94.2	Ę.	0.7	17	3.6	30	4	2 -21.4	0.0	153
Prices																				
GDP Deflator	100.0	117.8	137.1	167.4	213.9	248.8	292.6	363.3	519.4 8	86.5 179	22.8 25	50.1 326	8.9 421	2.0 627	8.8 903	0.3 11902	000001 0	274110	450381	
CPI	100.0	115.7	129.2	149.2	172.8	206.0	241.7	307.2	446.3 7	08.3 14(	38.6 20:	33.1 266	0.0 349	5.4 518	6.4 751	8.2 10120	19 14052	5 24642 5	40034 4	A1500 0
External Terms of Trade	0001	104.5	87.6	9.19	72.8	68.7	76.8	74.0	4.77	74.9 (	52.6	58.2	6.5 5	8.8 5	8.0 5	59 · 65	13 69	0 720	0.00	67.4
Exchange Rate																				
Official Exchange Rate	11.5	14.9	14.2	14.2	13.9	14.4	16.1	18.0	24.3	31.1	10.0%	11.2 16	2.6 22	5.5 36	6.7 52	2.0 674	5 857	2 1422.3	21212	2608.6
Real Effective Rate										×	9.2 10	M.3 IC	17.8 10	3.0	6.7 9	7.3 87	2 81			
Manufacturing Wages																				
Real Wages	62	82	84	85	94	105	011	131	136	140	117	123	117	16	20	80	01 00	ő		
Share of Wages In														-	1	2	2	2		
Value Added	26	27	27	27	26	32	32	38	38	38	31	25	23	25	23	21	16	7 16		
Annual Growth Rates :		1291	1972	1973	1974	1975	1976	1977	1978 1	679	1 080	181	82 10	83 10	A. 10	85 101	108.	1088	0801	0001
Internal Terms of Trade												-	:	-	5	2	2	00/1	1011	744
Agriculture		-3.2	3.0	12.8	2.1	0.0	3.0	1.0	- 9.9		-3.5	0.7	. 1.7	6.1	3.9	1.4	4 2.6	۰. ک	8.4	41
Industry		1.5	4	-4.7	1.8	-2.4	4.2	1.3	1.11	5.0	9.7	0.0	3.0	1.6 1	1.4	- 13	-i.	2.8	4.8	5 P-
Manufacturing		3.3	4.8	-2.7	4.8	4.1	4.8	-0.5	20.8	10.9	9.6	2.5	2.3	1.9	0.0	<u>.</u> 2	8	4	9.5	-7.3
AGR / IND		-4.7	7.4	18.3	0.3	2.4	7.5	0.3	- 15.9	l- 0.0l	2.0	0.7	6.6	3.4	2.5	5.3	3	5.9- 7	13.9	8.8
			:	:																
GDP defator		17.8	16.4	8	27.7	16.4	17.6	24.2	43.0	0.7 10	Q.2 4	2.2 2	8.2 21	8.9	4	10 31	.7 38.	1 66.7	64.3	54.6
CH		15.7	11.7	15.4	15.8	19.2	17.4	27.1	45.3	8.7 11	0.2	6.6 3	0.6 31	4	8.4	5.0 34	.6 38.(	3 75.4	63.3	603
External Terms of Trade Exchange Bate		4.5	-16.2	4.8	-20.7	-5.6	11.7	-3.7	4.6	-3.1 -1	6.4 -	. 12	3.0	12	1.3	20 20	0	4.3	-8.3	20
Nominal (Official) Date		20.6	74-	UU	10,	4.6	911	11.8	35.0				-						1	
Real Effective Exchange Rat	0				i	}	2	2		2	r ·	2 4 2 12 1	3.4	6 ¥ 5	9 IS	6. 10 10 10	- 7 - 7 - 7	8	49.2	22.9
Keal Wages		6				6	•	•												
Manufacturing		3.U	7	<u>.</u>		12:0	4.4	18.8	3.0	2.9 -1	6.4	5.1	4.9	.1- 8.0		1.6 -4	.2	3 -4.5		

Sources: World Bank, World Tables, IMF, IFS, and World Bank (1988)

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Table 13: Government Budget, Resource Balance and Foreign Debt Ratio in Turkey, 1970-90		
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(per cent of GDP)																					
	1970	161	1972	1973	1974	1975	1976	1977	8791	1979	1980	1981	1082	1041	1044	IORC	1084	1001			
Government Budget																	202	/0/1	1700	1907	2
Revenues	19.7	206	20.4	2.1	17.5	210	21.6	21.7	22.9	23.0	21.8	22.5		200	0 11	176	17.0	9.21		101	
Current Expenditures	159	16.7	15.5	164	139	157	166	061	19.5	202	18.7	167		170	0	2.2	17.3		4 7 6	0 0	2 2
Savings	36	38	5.0	3.7	3.5	5.2	50	2.7	3.3	2.9	31	58		06	1					2	è.
Copital Expenditures	<b>64</b>	73	7.2	55	54	<b>6</b> .0	7.0	88	76	92	17			22	2	44	20		7 4 2 6		प ( - (
Budget Deficit	-25	<b>3</b> .6	22	6 I -	-1 B	£.t-	·20	Ģ	-43	63	3.7	9 l·		4.2	001-	46	32	00	. e	4 5 C	4 C
Gross Dom. Savings	17.5	14.3	181	16.8	15.2	15.0	18.3	1.71	15.1	15.4	14.1	16.6	5.71	15.3	15.3	17.8	215	P 62	Ŕ	717	
Gross Dom. Invest.	19.8	17.8	20.9	0.61	21.6	23.2	25.1	25.2	18.7	18.6	21.9	22.0	20.6	9.61	19.5	21.0	24.4	25.4	0 70	227	1 22
Resource Balance	-2.3	-3.5	-2.B	-2.2	<b>6</b> .4	8.2	<b>6</b> .8	61	-3.6	-3.2	-7.8	-5.4	-3.3	en P	4.2	-3.2	-2.9	-2.0	2.1	-10	- 60 - 7
Current Account Deficit	-0.5	0.2	1.2	3.1	-2.0	41	6. 9	<b>Q</b> .	-2.4	-2.1	0.6	-34	-2.0	5	-3.3	-2.3	-2.9	11.	1.B	.0.7	3.5
Foreign Debi (\$ billion)	2.0	2.3	2.5	3.0	3.3	4.8	5.4	11.5	14.9	15.9	1.61	19.2	1.91	20.3	216	26.0	32.6	40.6	40.8	41.4	40.1

Sources: World Bank, World Tables

Sector	<u>1960-70</u>	<u>1970-80</u>	<u>1980-88</u>	
Agriculture				
Employment	-0.1	0.2	-0.2	
Value Added	2.5	3.4	3.7	
Employment Elasticity	-0.04	0.06	-0.05	
Industry				
Employment	4.9	3.9	2.3	
Value Added	9.6	6.6	6.0	
Employment Elasticity	0.51	0.59	0.38	
Manufacturing				
Employment	5.3	4.3	2.7	
Value Added	10.9	6.1	7.2	
Employment Elasticity	0.48	0.70	0.37	
Services				
Employment	4.9	4.6	3.5	
Value Added	6.9	6.8	4.8	
Employment Elasticity	0.71	0.68	0.73	
Total				
Employment	1.4	1.7	1.3	
Value Added	6.0	5.9	5.3	
Employment Elasticity	0.23	0.29	0.24	

 Table T4: Aversge Annual Growth of Employment and Output, and Employment Elasticities

 in Turkey, 1960-88

Source: World Bank, World Tables, and Bulutay, 1992, Table 1, pp.40-43

## Table T5: Input Use in the Agricultural Sector in Turkey, 1970-89

	1970	1980	1989	1970-80	1980-89
% Irrigated Land (1)	7.3	8.2	8.9	1.2	09
Fertilizer Use (2)	17.4	57.4	65.1	11.9	14
Tractors in Use (3)	42.2	171.7	264.1	14.0	4.8
Labour / Land Ratio (4)	45.8	43.5	47.1	-0.5	0.0
Labour/ Irrigated Land Ratio (5)	631.2	532.6	530.7	-1.7	0.0

Notes: 1- Per cent of irrigated land in total arable land. 2- Kg per HA of arable land.

3- Tractors per hundred HA of arable land.
4- Agricultural labourer per hundred HA of arable
5- Agricultural labourer per hundred HA of irrigated land.

Source: Agrostat, FAO

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