The Arab Region's Unemployment Problem Revisited

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Abstract

The Arab world is confronted with an increasing pressure coming from the supply side of the labor market, generated principally by the unemployed persons looking for a job, the new entrants on the labor market and the expected increase of the women labor force participation rate. This pressure is compounded by structural considerations relating to the slow labor productivity growth, low demand for skills, slow and erratic domestic investment growth, low attractiveness of foreign direct investment and high dependency on the dynamics of the international oil market as well as labor migration. This working paper examines the main trends in the Arab labor market affecting both supply and demand of the labor force, and presents an overall assessment of the active labor market programs adopted in some Arab countries. It also presents some programs and policies aiming to enhance employment opportunities of Arab youth.

إعادة النظر في مشكلة البطالة في المنطقة العربية

ملخص

تواجه معظم الدول العربية ضغوطات متزايدة من جانب العرض في سوق العمل كنتيجة للمخزون المرتفع الفعلي للعاطلين عن العمل و بالخصوص الشباب، وللداخلين الجدد في سوق العمل، وللزيادة المتوقعة في معدل مشاركة المرأة في قوة العمل. ومما يزيد من تفاقم هذا الضغط، من جانب الاعتبارات الهيكلية، بطء نمو إنتاجية العمل، وانخفاض الطلب على المهارات، وبطء وعدم انتظام نمو الاستثمار المحلي، وانخفاض الجاذبية للاستثمار الأجنبي المباشر والاعتماد الكبير على القوى المحركة لسوق النفط الدولية، فضلا عن هجرة اليد العاملة .تخصص هذه الورقة لدراسة الاتجاهات الرئيسية في أسواق العمل العربية و التي تؤثر على كل من العرض والطلب على القوى العاملة، كما تقدم الورقة تقييما سريعا لبرامج أسواق العمل النشطة التي اعتمدت في بعض الدول العربية والهادفة بالخصوص إلى تعزيز فرص العمل للشباب.

1. Introduction

Over the last four decades, most Arab countries have embarked on economic reform programs with the aim of reducing the budget deficits and achieving macroeconomic stability. As a result, inflation rates have fallen significantly in the period from 1995 to 1998 compared with the period from 1985 to 1994. However, the growth rate of GDP per capita in the 1990s, increased at an average of no more than 1% per year, and the relatively low savings rates in the region were accompanied by an insignificant increase of the average investment rate by 1.1% in the 1990's. It became apparent that none of the Arab non-oil economies had succeeded in utilizing the economic boom of the *oil decade* 1973-1982 significantly to increase the number of real employment opportunities through economic diversification, particularly through industrial and agricultural development. Thus, for most of the Arab (oil and non-oil) economies, the *oil boom* created some strong *ripple effects*.

The combination of economic recession and at least stagnation in the number of Arab workers in the Arab oil countries during the 80s of the last century, in parallel to the continuing rapid growth of the workforces, led to a sharp increase in unemployment in the Arab non-oil economies. Hence after four decades of economic adjustment, Arab countries face two-digit unemployment rates that are higher than all other regions of the world. Although it is difficult to compute precise estimates of the unemployment rates in this region of the world, recent calculations put this rate at between 10-15% in Algeria, Egypt, Jordan, Lebanon, Morocco, Syria and Tunisia and at 16-20 % in Libya, Sudan and Yemen, and more than 30% in Mauritania and Somalia[1].

Youth unemployment reflects the level of economic activity in general as well as the trends in the demand on labor in the labor market. In the Arab region, where at least 20 percent of the total population is between 15 and 24 years, each year over 500,000 enter the labor market, the vast majority are in the age cohort of 15-24. However, youth unemployment rates in this region are much higher than adult unemployment rates, averaging 27.3 % in 2007. It accounts for 54.2% of total unemployment (more than 70% of unemployment in Jordan, Mauritania, Yemen as well as Egypt) and is considered as the highest in the world (ahead the poorest region in the world, Sub-Saharan Africa which has the second highest rate of youth unemployment 21%)[2].

Moreover, most unemployed are educated. The ratio of secondary and tertiary graduated in total unemployed is over 51% in Tunisia, 44% in Morocco and 34% in Algeria[3]. These figures are a source of concern not only for economic reasons, but also because of their socio-political implications especially in autocratic societies. Indeed, experiencing unemployment at lower ages might have not only a negative and permanent impact in hampering young people's productive potentials and future employment opportunities, but can also lead to marginalization, exclusion, frustration, low self-esteem and, sometimes, to acts that impact negatively on society and destroy the social structure.

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[1] Key indicators, aggregated tables of the eighth issue of Circular of labor statistics in the Arab countries, Arab Labor Organization:
http://www.alolabor.org/nArabLabor/index.php?option=com_content&task=category&sectionid=15&id=85&Itemid=64

[2] Arab Labor Organization estimates based on official Arab statistical sources (imgration-2010.xls):
http://www.alolabor.org/nArabLabor//index.php?option=content&task=view&id=472

[3] KILM Sixth Edition, April 2010, ILO.

In a number of Arab countries the unemployment problem is also largely a problem of female unemployment. The participation of women in the Arab labor market has undoubtedly increased progressively over past decades, and indicators related to the involvement of women in the economy continue to point upwards. However, these quantitative improvements mask persistent qualitative disparities with regard to the status of women and men at work. Indeed, in the Arab region there is an increasing tendency towards the feminization of unemployment. Female unemployment rate of 16.5% was 5.9% points higher than the male rate of 10.6 % in 2003 in Arab region. Unemployed women are mainly young new labor force entrants with primary and secondary education, and laid off workers following restructuring and privatization particularly in Jordan, Morocco, Tunisia and Egypt.

Over the years, several explanations have been proposed for poor performance of employment and the consequent development of the high unemployment rates above all among educated youth in the region.

One of the most influential is the *skills mismatch* hypothesis. In many Arab countries, there is a widespread belief that workers' skills and education are not adequate for the demands of jobs in the current economy. Journalistic reports, popular, academic and policy recurrent debates on school quality and education reform all suggest a mismatch between the skills workers possess and what jobs require, what economists call an imbalance between the supply of and demand for human capital or the *skills mismatch hypothesis*. Many believe that the problems will become even more serious because the pace of change is accelerating and the workplace is becoming increasingly high tech, service-oriented, and reorganized to involve greater employee participation in the workplace.

According to this explanation, the education system in many Arab countries produces skills that are not valued by employers, while raising the expectations of those who acquire them. As a result, the unemployed are not interested by the existing vacancies, whereas the employers are not willing to fill them with the available candidates. The mismatch is considered to be particularly severe for those who are just coming out of school, and have no work experience. The practical remedy to the unemployment problem, if the skills mismatch hypothesis is correct, is to reform the education system and to supplement it with vocational training geared to the needs of the labor market. Vocational training programs of this sort are supposed to make the unemployed more employable.

A second explanation focuses on public sector employment and pay policies. In many countries, public sector jobs are characterized by more stability, higher benefits, lower effort and more prestige than their private sector counterparts. In almost all Arab countries, they are also characterized by higher pay. Labor market entrants thus face an incentive to wait for job openings in the public sector. Some of them would rather remain inactive than take the available jobs out of the public sector.

Based on this second explanation, a credible reform of public sector recruitment and pay policies would be the most effective way to reduce unemployment, because it would discourage the *queuing* attitude.

Finally, **a third explanation** emphasizes the lack of sufficient employment opportunities in the Arab private sector, characterized by lack of entrepreneurship culture and high degree of aversion to risk. Private investment, generally focused on protected domestic markets, remains compressed at levels below potential and is losing dynamism in the Arab region. It's both insufficient and inefficient.

One of the main reasons for investment insufficiency is that savings are not properly channeled by the financial sector (dominated by the banking system) to productive projects. The lack of liquid investments in the Arab region has a direct negative effect on productive investment in the region, as it makes it difficult for entrepreneurs to raise capital to finance their potentially good ideas. The low levels of development of capital forces potential real investors into the hands of the banking system, which has become immensely powerful, both economically and politically. Despite their domination of the financial sector, banks are not efficient enough to play the critical role that they must in the process of economic growth and development. As a result, the ratio of private investment to public investment is unusually low; for the Arab region as a whole, the ratio is close to 2 (slightly larger for non-oil economies). It remains well below the levels of OECD economies (ratios close to 6) or that of the East Asian economies (ratios close to 5).

Another source of lack of employment generation in the Arab world is the region's reduced overall economic efficiency. Total factor productivity levels for a sample of Arab countries between 1975 and 2000 are very low. With the exception of some Arab countries, productivity growth has been negative; that is, the efficiency of the economy has markedly deteriorated. This situation may be attributed to the weak business environment of the Arab region (limited openness of key services to competition, heightened business uncertainty stemming from commercial risks, and imperfections in the regulatory framework and economic governance) and to the low quality of human capital which hampers the profitability of investment.

Based on this third explanation, strengthening the investment climate in the Arab region, making more room for private investment in services and network industries, which have been traditionally under the government's umbrella, and further improving access to finance, are key to fostering private investment as a key precondition for accelerated growth and faster job creation in the region.

While all three explanations are appealing, the evidence to support them in many Arab countries is mostly outdated and often weak. I suspect we really do not know what is responsible for the growing crisis of unemployment in Arab region. Knowledge is always slow to catch up to reality especially because of scarcity of available Arab human capital and employment/workforce data.

This working paper is organized as follows. The next section examines the main trends in the Arab labor market affecting both supply and demand of the labor force, and presents an overall assessment of the active labor market programs adopted in some Arab countries. Section 3 presents some programs and policies aiming to enhance employment opportunities of Arab youth. The final section, Section 3, provides the concluding remarks.

2. Main trends in the Arab labor markets

2.1. Labor supply considerations

2.1.1. Demographic changes and employment pressure

As in other developing areas, rapid population growth in the Arab countries during the second half of the twentieth century was the outcome of rising natural increase rates, which climbed from approximately 1.8 per cent in the 1930s and 1940s to a peak of 3 per cent in the early 1980s. Since then, the natural increase rates in virtually all of the Arab countries (with the exception of Mauritania, Occupied Palestinian Territory and Yemen) have decreased considerably, due to a steady decline in fertility rates. By 2000-2005, the average natural increase rate in the Arab region was 2.2 per cent and the average total fertility rate was 3.8 per cent. However, despite the substantial fertility reduction, the natural increase rate of the Arab countries is still the highest worldwide (average rate 2.65), even compared to less developed regions (average rate 2.9).

<Insert **TABLE 1:** Population and Fertility Rate in Arab countries (thousands)>

The prolonged high natural increase rates in the Arab countries have led to the creation of a wide-based age pyramid. By 2005, the percentage of 15 years of age within the total Arab population was 35.5 per cent (very high compared to less developed regions and the World where this age cohort represents 21 per cent and 19 per cent respectively). Thus, despite the fertility reduction during the past 20 years, in terms of absolute numbers the population growth in the Arab region during the mid-2000s was similar to that of the mid-1980s, simply as a function of the sharp increase in the number of couples in the reproductive ages. This phenomenon, known as *the population momentum*, refers to the fact that the future population growth will be influenced by its present age structure. Thus, a large population increase will persist in all the Arab countries for at least several more decades, reflecting the high natural increase rates during the past two generations.

<Insert **TABLE 2:** Percentage aged less than 15>

The implications of the wide-based age structure for the workforce are very important. In the short term, the direct result of the high percentage of the young population has been low crude economic activity rates (around 30-40 per cent in average by 1980). By comparison, the crude economic activity rates in the European countries were much higher (around 50-60 per cent by 1980), due both to higher percentages of the working-age population and much higher female labor force participation rates.

Thus, while the bread-winners/dependants ratio is 1 for 2 in the developed countries, the same ratio is 1 for 4 in the Arab countries, leading to what has been called *the low income trap*.

<Insert **TABLE 3 :** Adult (15+) economic activity rate >

The long-term implications for the future size of the Arab workforces are no less significant. Due to the wide-based age pyramid, the number of work opportunities needed in the Arab countries will continue to grow rapidly, at least in the coming three decades, until the number of those

entering the workforce, namely, those in the 20–24 age group, will be equal to those leaving the workforce at the age of 60–65.

In Egypt, for example, in 2000, the 0–4 age group numbered 8.2 millions, while the 40–44 age group amounted to only 3.74 millions. This means that the number of those entering the workforce during the period of 2020–24 will be 2.2 times higher than the number of those retiring in the same years. In the case of Saudi Arabia, approximately 5.5 million citizens will be entering the labor force during the second decade of the twenty-first century, which is equal to 37 per cent of the current Saudi national labor force (14.7 millions in 2005).

Moreover, during the past two decades, as a result of substantial growth in the female labor force participation rates, the labor force growth rates were higher than the natural increase rates. Since this process is expected to continue, it is reasonable to predict an even higher increase in employment demands in the foreseeable future. With an average growth rate of more than 3 percent annually, Arab countries' labor force is growing at a higher rate than any other region of the world. In spite of the global fall in birth rates, the high population growth rates of the past are continuing to push new entrants into the job market more quickly than the ability to generate jobs.

<Insert **TABLE 4**: Labor Force and Population Growth rates >

The wide-based age pyramid also hampers efforts to enlarge investments in education in per capita terms, due to the steady increase in the size of the school-age populations. This rising demand forces the Arab governments to increase their educational budgets in line with the increase in the number of students only to maintain the current educational level. Thus, the challenge of keeping pace with the advance of technology is made even more difficult to overcome.

At the same time, in many Arab countries, governments have been slow to understand and respond to the implications of a changing demographic picture. The ratio of workers to dependents in the region has long been the highest in the world, where 30% of the population worked to support the rest in 1990, compared to a world average of 48%. This situation is changing fast, since declining fertility rates mean that more people will enter the economically active population every year than will be born. This demographic transition over the next 20 years will open a significant window of economic opportunity for Arab countries. As happened in East Asia during the past two decades, a proportionately bigger and growing work force could potentially add 2% a year to economic growth rates, while improving rates of savings and investment (Williamson and Yousef 1998, Yousef 2004).

<Insert **TABLE 5:** Dependency Ratios >

However, the mechanics of the demographic gift implicitly assume well-functioning labor and capital markets[4]. In the absence of dynamic labor markets and steady output growth in the 1990s, the expanding working-age population contributed to the twin problems of unemployment and stagnant real wages. This was especially true for first-time job seekers whose unemployment rate was twice that of the labor force in a number of Arab countries (Al-Qudsi, Assaad and Radwan 1995).

2.1.2. Women labor force participation and unemployment

Women's economic participation rate, their proportion in the labor force, and their employment pattern varies among the sub-regions of the Arab world. Interestingly enough, women's economic participation and labor force share are highest in the least developed economies of the region, such as the Djibouti, Comoros, Mauritania and Somalia, while they are the lowest in some of the more developed Gulf economies which have the highest female educational records. The participation record of women in the diversified economies of Morocco, Egypt, Lebanon, Syria and Tunisia tend to exhibit a rate close to the regional average.

The proportion of women in the adult labor force has risen virtually in all Arab countries over the past two decades. During the 1990s, female labor force participation rates in Arab region increased by an average of 1.6 per cent per year, faster than any other region in the world. Between 1980 and 2005, the participation of women in the labor force approximately doubled in Algeria and Bahrain, more than doubled in Kuwait, Libya and Saudi Arabia, while it almost tripled in the United Arab Emirates.

Increases in female labor force participation cut across all age groups but are most evident among young women. The largest increases are in the labor force participation rates of 25-34 age cohort particularly in Libya, Algeria, Kuwait, Bahrain and Tunisia.

<Insert **TABLE 6**: Proportion of Women in the Labor Force>

Despite the growing proportion of women in the labor force, their economic activity rate, namely, the percentage of the population that is economically active is remarkably lower than that of men in the Arab region particularly for the age cohort 35-54, except for the least developed economies. Excluding these countries, in 1980, the economic activity rate of women ranged between a minimum of 8.7 per cent in Saudia Arabia, and a maximum of 31.5 per cent in Sudan, while the economic activity rate of men varied between 63.4 per cent in West bank and Gaza and 94.5 per cent in the United Arab Emirates. Furthermore, throughout the Arab region, the gender gap in labor markets, defined as the differential between the activity rate of men and women, is remarkably wide. In 2005, the gap is narrowest in Kuwait and widest in Saudi Arabia, at 36 and 60.7 per cent respectively.

[4] Recent cross-country studies indicate that national savings/investment ratios are strongly influenced by demographic transitions: high dependency rates depress both savings and investment, while a rise in the working age population induces the opposite (Higgins 1998; Lind and Malmberg 1999). Thus, the ability to absorb an expanding labor force, in the presence of functioning credit markets, would support a faster rate of capital accumulation and wage growth.

<Insert **TABLE 7:** Women Economic Activity Rate>

<Insert **TABLE 8:** Gender Gap in Economic Activity>

In the least developed economies, women's relatively high participation rates are generally explained by their heavy involvement in agriculture and in informal economic activity. As such, while their proportion in the labor force is well above the regional average, their employment record in the formal sectors of the economy is substantially low. On the other hand, in countries like Oman, Qatar, Saudi Arabia, and the United Arab Emirates, while women enjoy reasonably good educational levels, women's share in the labor force is relatively low. This may be explained by the presence of a cultural and value system which places considerable restrictions on the work of women in certain domains, particularly in the value added sectors of industry.

As noted above, there exist substantial regional variations in female labor force participation rates in Arab region (excepting least developed Arab countries mentioned above). Table 7 reveals this fact and female economic activity rate in 2005 ranges from 10.3 per cent in West Bank and Gaza Strip to 49 per cent in Kuwait. Such variations illustrate the persistent gaps in literacy rates in general and educational attainment in particular, for women, especially in rural areas. Furthermore, because of overall economic shrinking in many Arab countries, women's chances of entering the labor market are greatly reduced compared to those of men, with many educated women staying out of the labor market due to lack of enough new job opportunities that would absorb both genders. Still, in situations of job scarcity, men in the Arab world are advantaged over women. On the other hand, women who succeed in entering the labor force often do not reach higher administrative and managerial positions, remaining largely within the government civil service in educational and social related jobs.

The large increase in female labor force participation rates during the last two decades may have contributed to the high rates of unemployment, especially among young females. Indeed, data on selected Arab countries indicates that unemployment rates among females are the highest in the world, both in absolute terms and compared to unemployment rates for males. While the regional mean for women's unemployment rate stands at 15.5%, compared to 9.9% for men, considerable regional variations exist. In Egypt for instance, women's unemployment rate is roughly fourfold that of men, standing at 23.9% and 6.3%, respectively. The highest female unemployment rates are recorded for Syria, standing at 24.1%, compared to 8.3% male unemployment, while Kuwait records the lowest female unemployment rate, listed at 1.7%.

A common trend in the pattern of unemployment is differentiation by gender. In Egypt, Jordan, Qatar, Saudi Arabia, Syria and Tunisia, women's unemployment rates not only are considerably higher than men's but they are disproportionately high given women's far smaller share in the labor force.

The international empirical evidence on the link between increasing female labor force participation rates and gender differences in unemployment is very limited. Other countries and regions, at various times, have experienced sizable and sustained gender differences in unemployment rates. Azmat et al. (2004) find that, for a panel of OECD countries, gender gaps in unemployment rates are mostly concentrated among Mediterranean countries, but reasons for this gap remain largely unexplained. The researchers suggest that gender-based discrimination may

explain part of this gap. Seguino (2002) finds that aggregate economic conditions and job segregation explain part of the gender differences in unemployment rates in Caribbean countries. High unemployment rates might encourage females to look for work in order to help support their families (the added worker effect), resulting in higher female unemployment rates. However, most of the differences again remain unexplained, leading Seguino to suggest possible discrimination.

<Insert **TABLE 9:** Unemployment rate>

In the Arab countries, it is tempting to attribute part of the large gender differences in unemployment rates to increases in relative female labor force participation. To the extent that males and females tend to work in different occupations, higher rates of female entry into the labor force may lead to higher female unemployment rates that can persist over long periods of time, but which are also transitory in nature. Once female labor force participation rates reach a new steady state, male and female unemployment rates will converge (Myatt and Murrell, 1990). In this case, no policy intervention is required. A preliminary analysis, using a cross-section of MENA countries, finds a positive correlation of 0.32 between changes in labor force participation rates between 1990 and 2000 and gender differences in unemployment rates around the year 2000. Female unemployment in these countries appears to be part of an overall problem of labor force insertion.

Social norms might also be an important factor in explaining gender differences in unemployment rates. Social norms may limit the mobility of women (by requiring them to obtain work close to their homes or limiting their ability to drive). Social norms may limit international mobility, by discouraging females in labor-abundant countries from seeking employment elsewhere, while encouraging males. This would relieve domestic labor supply pressures in male-dominated occupations, but not in female-dominated occupations. Social norms may limit females' ability to search for appropriate jobs, by dictating what constitutes acceptable work for females and males.

2.1.3. Urbanization and internal migration

Populations in the Arab region tend to be unequally distributed on the land, both among Arab countries and within each country. While all six GCC countries together have a population of about 32 million (with Saudi Arabia alone having about 22 million inhabitants), Egypt alone has a population of about 69 million. The density per square kilometre varies sharply from three persons in Libya to as many as 1,000 in Bahrain. One reason for this is that a very large percentage of Arab region is austere desert. Thus, in Egypt the non-desert areas of the Nile Valley and the Delta have a density of over 1,200 inhabitants per square kilometre, while the desert areas (over 95% of total territory) have a density of one.

This characteristic of the region explains why, despite the vastness of territory, many villages and cities appear to be overcrowded. This pattern also implies mounting pressures on the limited non-desert areas in the region. About 70% of the poor in the Arab region live in rural areas, even though rural areas support less than 43% of the total population. Together with several political and socio-economic factors, this situation has triggered a stream of rural-urban migration in all

Arab countries, leading to rapid urbanization and, in turn, to the transformation of urban spaces into increasingly significant clusters of communities originating from the countryside.

In 1960, only 30 per cent of the Arab population lived in cities. By 2005, urban areas were estimated to contain over 80 per cent of the populations in 8 Arab counties and more than 50 per cent of the population in all Arab countries, expect for Egypt (42.3 percent), Somalia (35.9 per cent) and Yemen (26.3 per cent), which remain predominantly rural.

<Insert **TABLE 10:** Urbanization rate>

The inflow of rural migrants in Arab region has been much more rapid than the pace at which they are absorbed into the market. As a result, many cities in the region are populated with unemployed and underemployed people.

One of the major consequences of the rapid urbanization process has been indeed the rapidly increasing supply of job seekers in both the modern-formal and traditional-informal sectors of the urban economy. In most Arab countries, the supply of workers far exceeds the demand, the result being extremely high rates of unemployment and underemployment in urban areas. Accordingly, migration can no longer be casually viewed by economists as a beneficent process necessary to solve problems of growing urban labor demand. On the contrary, migration today remains a major factor contributing to the phenomenon of urban surplus labor; a force that continues to exacerbate already serious urban unemployment problems caused by the growing economic and structural imbalances between urban and rural areas. Accordingly, the new orthodoxy, due mainly to Todaro (1969) and Harris-Todaro (1970), considers rural-urban migration as *a symptom of and a countributing factor to underdevelopment*. Indeed, assuming potential migrants respond to the urban employment probability and treating rural-urban migration primarily as an economic phenomenon, the authors then demonstrates that, in certain parametric ranges, an increase in urban employment may actually result in higher levels of urban unemployment and even reduced national product (the so-called Todaro Paradox).

The paradox is due to the assumptions that in choosing between labor markets, risk-neutral agents consider expected wages, that the probability of obtaining urban employment is approximated by the ratio of urban jobs to the urban labor force, and that the urban wage rate is considerably and consistently higher than the rural wage rate. Under these assumptions, inter-labor market (rural-urban) equilibrium mandates urban unemployment. This unemployment ensures that the expected urban wage is equal to the rural wage (which is assumed constant throughout). The repercussion of this simple set of assumptions is that contrary to received wisdom, once the migration response is factored in, several policies aimed at reducing urban unemployment will raise urban unemployment rather than reduce it.

Rural-urban migration is linked to changes in the sectoral distribution of employment. Since the 1970s, the share of employment in agriculture declined rapidly until the mid 1980s and more slowly since then. However, manufacturing and other industries have not increased proportionally to the decline of the agricultural sector. The development of urban areas is still closely tied to the rural economy through the exchange of labor, goods, services, information and technology. Remittances from urban areas to rural areas are an important source of income for

rural populations in the Arab region as elsewhere. In Morocco, for example, urban remittances are as high as 30% of the income of the poor (World Bank, 2000).

Statistics and empirical studies on internal migration in Arab Countries are quite rare. Below, we provide brief review of previous empirical studies devoted to the topic of internal migration in some Arab countries:

- **Syria:** In Syria, in contrast to other Middle Eastern and North African countries which were also witness to a large rural–urban migration, the major proportion of the migration movement has occurred within the borders of the provinces themselves, rather than from the rural regions to the capital.

  One of the most comprehensive analytic study of internal migration in Syria is the completed Strategic National Plan for internal Migration in the Syrian Arab Republic (Zakaria and El Sibai, 1991), sponsored by the State Planning Commission in cooperation with UNFPA and ILO. It reports the results of a large internal migration household survey carried out in 1987. The survey is based on a sample of 5,000 households in three cities (Damascus, Aleppo and Homs) and a sample of about 3,000 households selected randomly from the rural sector of the country as a whole. One of the main conclusions of the study is that unemployment in the countryside is an important determinant of citywide migration and migrants in the city are involved mainly in service jobs, marginal work, and the public sector, and hence migration is a means of transplanting surplus laborers of the cities. Furthermore, villagers have a desire to migrate for a better income jobs in urban areas, owing to the disparities in wage levels and job opportunities between the city and the countryside. This is reinforced by the higher educational attainment of the rural youth population.

  In 2000, the Syria Internal Migration Survey project (SIMS in short) has been conducted jointly between the University of Damascus, the Syrian central Bureau of Statistics and Fafo institute for Applied International Studies. Interviews with more than 20,000 families were successfully completed. The sample is based on a multi-stage stratified design, using a sampling frame constructed from the 1994 census of population and household listings updated of all the selected clusters. Several conclusions can be drawn from this project. First, a disproportionally large number of migrants are of rural origin. Second, the dominant form of migration in Syria, with respect to direction, seems to be from rural to urban areas. Third, rural-urban migration is often attributed to an urban bias in development planning. However, the evidence is mixed and there is some evidence pointing to more migration as a result of enterprise development in the countryside. Forth, for male migrants work related motives dominate while for female migrants marriage related reasons are more important.

- **Egypt:** In Egypt, the acceleration of the urbanization process began in the late 1930s and early 1940s. Internal migration is responsible for the redistribution of nearly 25 percent of Egypt's population, and for the rapid growth of Egyptian cities, especially Cairo and Alexandria.

Table 11 gives an overview of internal migration for urban and rural areas by rural/urban origin or destination in Egypt for the last three censuses (1976, 1986, and 1996). Some key points can be drawn out of this Table. The first feature is the remarkable constancy of the total migration recorded in each of the three censuses. On the other hand, the disaggregation of migration types shows that these disaggregated flows are indeed changing. Hence total migration remains curiously constant, whilst the individual components of that mobility are markedly shifting. Two noteworthy trends can be highlighted: the sharp fall of rural to urban migration between 1976 (25 percent) and 1986 (13 percent), and the equally sharp rise of urban to rural migration between 1986 (10 percent) and 1996 (23 percent).

<Insert **TABLE 11:** Urban/rural migration by type of movement, Egypt, 1976–1996>

These trends, however, do not represent the full extent of rural-urban migration in Egypt. First, long-distance rural–urban migration to Cairo from Upper Egypt is a long-standing phenomenon in Egypt, traceable to the first census around a hundred years ago. Second, much of the increase in urban–rural migration between 1986 and 1996 is probably explained by return migration of retired rural–urban migrant workers back to their home villages, these rural-origin migrants having migrated to the cities in earlier decades. Third, we can strongly suspect that the bulk of rural laborers to Cairo are not officially registered by the census as rural–urban migrants because of their continuing *de jure* residence in rural areas. Yet another factor is the fact that a significant percent of migrants from rural to urban areas (especially to Cairo) tend to hide their rural origin and to claim that they are not migrants from rural areas. And finally some rural–urban migrants may escape census counts because of their "hidden" residence as squatters with no fixed abode.

The reasons of rural–urban migration in Egypt are almost the same as in Syria and most other developing countries. Push factors have constituted the dominant reasons, while pull factors function only as secondary reasons. Push factors include scarcity of cultivated land, low level and instability of income in the rural areas, concentration of the rural economy almost exclusively on agriculture, and the gap in health care and educational services between the urban centers and the rural areas. The pull factors are mainly the desire for acquisition of higher education, industrial development in urban centers, and the generally more attractive urban work and social facilities. One of the strongest factors in Egyptian internal migration is the search for better work opportunities than those existing at points of origin.

- **Morocco:** The degree of urbanization of Morocco in the twentieth century is unexceptional by Third World and North African standards. Both Algeria and Tunisia, for example, have a somewhat higher rate of urbanization. Urbanization and partial de-agrarization are general processes which also occur within rural Morocco, in which so-called rural populations increasingly earn additional income outside the traditional agricultural sector. Previously, such livelihood diversification was achieved primarily through long-distance internal migration. However, the development of numerous centrally located villages into small or medium-sized urban centers is increasingly offering non-agricultural employment within the "rural" provinces themselves (Berriane 1996; De Haas 2003).

This process of micro- and meso-urbanization, which has presumably been encouraged by decentralization policies and significant improvements in road and electricity infrastructure, over the interior of Morocco, has affected patterns of internal migration. An increasing number of internal migrants do not settle in the big cities, but in rapidly growing smaller and medium-sized towns near to or within the rural provinces themselves.

The second major source of Morocco's urban growth, after the high natural population increase, is rural migration which generally accounts for one third of the overall increase of urban population. For several decades, migration to the cities absorbed around two-thirds of the annual natural increase in rural areas. Rural poverty has always tended to be the main driving force behind rural–urban migration in Morocco. In the early 1960s, about 25 percent of the families in rural areas were landless, 50 percent had less than 3 hectares, and only 25 percent of rural families had more than 3 hectares. If rural poverty has been the main push factor, urban amenities such as education, health, and cultural services have been the main pull factors in the Moroccan case.

More recent trends in rural–urban migration in Morocco can be investigated based on the 1991 Survey on Internal Migration reported in the 1995 African Population Newsletter. Morocco has experienced a recent rise in urban population from 29.3 percent of the total population in the early 1960s to 48.4 percent three decades later. Rural–urban migration averages 3.6 percent annually and has played a key role over the past 30 years in population redistribution. In the survey of 1991, 33 percent of migrants reported the main reason for migration as the search for better jobs or better wages, 31 percent indicated migration was in order to join a family member or spouse, and 11 percent migrated for educational reasons. Some 87.7 percent of migrants were under 30 years old at time of departure; 39.5 percent were under 15 years, 25 percent were 15–19 years, and 23.2 percent were 20–29 years old.

The 1991 survey revealed that men tended to migrate for economic reasons, whereas women migrated primarily for family reasons. Most men were unmarried at the time of migration, while most women were already married. Four-fifths of migrating women did not have a formal education. About half of the men and the same share of the women were classed as unskilled. Only 7 percent sent remittances to relatives in rural areas, although 70 percent visited at least once a year.

One important outcome of rural-urban migration has been the growth of the so-called informal sector in urban areas. Although associated with hidden unemployment, urban under-employment and poverty, informal activities have become a means for many countries to cope with population growth, rural-urban migration, economic crises and unemployment. In some countries of the Arab region, the informal sector is estimated to contribute anywhere between one-quarter and two-thirds of non-agricultural employment, with Algeria (1985) at 25.4 percent, Tunisia (1989) at 39.3 percent, Morocco (1982) at 56.9 percent, Egypt (1986) at 65.3 percent, and Mauritania (1988) at 75.3 percent.

2.1.4. International migration

The South Mediterranean and Middle East constitute probably the most remarkable geographical region of the world with respect to labor migration movements. Of the top ten countries recorded in the 2004 Human Development Report, the first four are Middle Eastern, with another two ranked as sixth and ninth. Table 12 shows UN data for 2000: the highest ratio of migrants to total population not in the Arab region is in Singapore, with 34% (UNDP, 2004). In fact, the UN data seem to be underestimates, as most national data indicate even higher levels of migrant presence.

<Insert **TABLE 12:** Estimated migrant stocks circa 2000 in the Arab region>

The particularities of the region are not confined, however, to these simple stocks of temporary labor migrants in the Gulf countries. To this we should add the recent emigration histories of the Maghreb and Mashrek countries, along with their demographic pressures for continued emigration, the role of the latter as transit countries for illegal migrants from other regions, and the role of GCC states as a massive source of both recorded and unrecorded remittances to Asia and elsewhere.

It is possible to discern several *migration systems* operating in the region, although these are in flux and increasingly overlapping and becoming more complex. There are three broad systems, comprised of the GCC, Maghreb and Mashrek states.

The GCC countries

The main population flows within the Arab region have been associated with labor migration from non-oil producing Mashreq countries, especially Egypt and Yemen, but also Jordan and Palestine and to a lesser degree Syria and Iraq, to the oil-producing countries within the GCC: Saudi Arabia, Kuwait, Bahrain, Oman, Qatar and the United Arab Emirates. Although official data on these flows is either unavailable or not sufficiently accurate and reliable, most analysts agree that this type of regional migration peaked in the mid-80s. Employment estimates of Arab labor migrants to the Gulf during this period range between a low of 1.54 million to a high of 3.45 million.

<Insert **TABLE 13:** Estimated Percentage of nationals and expatriates in the population of GCC countries, 1995-2000>

Long before the Gulf crisis in 1990 and the subsequent war in 1991, GCC states started to recruit workers from Asia. The economic argument posited for this change in employment patterns was that Asian workers worked for less money and were more productive. Yet, in order to understand the recruitment policy drives of the GCC states in this period, non-economic considerations also need to be given weight. Moreover, the sheer presence and dependence on foreign labor was felt to pose a threat and measures were taken to make this migration phenomenon temporary rather than permanent. As Arab migrants had often tried to bring over their families, Asian workers appeared to be the safer choice in terms of both their politics and their status as temporary migrants.

The preference for non-Arab foreign nationals became even more pertinent in the aftermath of the invasion of Kuwait and Yemen, Jordan and Palestine's support for Iraq. About 1.5 million

people were displaced in the wake of the Gulf crisis in 1990/1991: about 800,000 Yemenis were expelled from Saudi Arabia, alongside 200,000 Jordanians and 350,000 Palestinians who were mainly expelled from Kuwait. No in-depth research has been carried out to study the impact of this situation on the economies and poverty levels of the sending countries. But obviously the lack of remittances, as well as pressures on local labor markets have been a huge burden, especially in Yemen, Egypt and Jordan where unemployment and recession rose significantly.

In the mid 1990s, Asian labor migrants from India, Pakistan, Sri Lanka, Indonesia, Philippines, Thailand, Korea and Bangladesh outnumbered Arab migrants by about one million (Girgis, 2002). However, a more in-depth study of Kuwait from 1989-2000 reveals that despite a decrease in numbers, Arab migrant workers have dominated the upper echelons of skill categories (technical, managerial and clerical), while Asian workers have dominated services, agriculture and production-related jobs. Jobs in sales have also been dominated by Arab workers. It is interesting to note that the overall foreign Arab population outnumbered the Asian population as many Arab workers tend to migrate with their families while Asian workers (both men and women) migrate on their own. This is partly related to the conditions (salaries, housing etc) related to high and low skilled jobs as well as the particular migration culture of Arab and Asian workers.

Since the 1990s, there has been a new trend influencing recruitment strategies and, potentially, future populations flows. As a result of persistently weak oil prices, financial contributions, depleted foreign assets and loss due to two Gulf wars (1980-1988, 1991), the GCC countries have started to experience recessions, and for the first time have recorded unemployment figures for nationals. In Saudi-Arabia, for example, the Manpower Council estimated the unemployment rate among Saudi nationals at 14% in 2000 and at 15 % in 2001. In addition to an economic crisis, GCC countries face a large pool of young first time job seekers, who benefited from the expanded and improved education system. About half a million GCC nationals are unemployed in a region that employs 7.5 million expatriate workers. All GCC states have introduced policies to reduce rising unemployment among their nationals, and to maintain or increase birth rates in order to curtail their dependence on foreign labor.

Whatever obstacles exist in the present time to speed up the process of the nationalization of the labor force, there is no doubt that, in the long run, national workers will replace a large number of expatriate workers. As GCC nationals will seek well paid skilled jobs, this trend will affect Arab migrants much more than Asian migrants who are predominately found in low skilled jobs. Girgis (2002) predicts *slow Arab out-migration* over the next decades. According to his estimates, the current out-migration in Arab countries will amount to a loss of remittances worth $1.55 billion over the period of 2003-2007 alone. In addition, there will be an increase in return migration which, in turn, will lead to greater pressures on local labor markets and may lead to greater unemployment rates.

The Maghreb

Since 1968, Morocco has had a consistent policy of maximizing emigration in order to manage unemployment levels, acquire hard currency through remittances, and raise skill levels through returning migrants. Tunisia and Algeria, initially followed a similar policy to that of Morocco; however, both encouraged their emigrants to return in the 1970s. Regardless of these differences

in policy, the outcome by 1999 was some 700 thousands each of Moroccans and Algerians residing in France, plus over 200 thousands Tunisians (Fargues, 2004). Their total presence in other European countries is of the same order, although the total of Moroccans abroad is estimated at 2,5 million or nearly 10% of the current population. IOM gives the expatriate Tunisian population at 690 thousands, of which 590 thousands are in Europe and 90 thousands in other Maghreb or Arab states (IOM, 2004). Remittances are also the most significant for Morocco, which is the fourth largest recipient in the world with US$3,3 billion in 2001, at 9,7% of GDP (Gallina, 2004).

Over the last two decades, the emigration of highly skilled professionals from Morocco and Algeria has become of great concern. There are no available statistics on the large numbers who have left for the USA, Canada, Germany and France: however, in just one scientific institution in France there are over 1 600 researchers from the Maghreb, of which nearly half are Moroccan (Mghari, 2004). The reasons for the exodus of professionals are not only pay-related, but also reflect general labor market and social conditions, such as lack of career opportunity and job satisfaction. However, the result of the brain drain is that enterprises are starved of skilled and motivated staff, and foreign experts are needed to fill the gaps: the costs of such international expertise are as much as 60-90% of development aid or investment costs (Mghari, 2004).

The Mashrek

The Mashrek countries of Egypt, Jordan, Palestine, Lebanon, Syria and Yemen have a migratory history between them dating back to the end of World War I and the collapse of the Ottoman Empire (al Khouri, 2004). However, the important period of emigration to the oil-rich GCC states began in the 1970s. Indeed, it was not until 1971 that Egypt openly permitted emigration of its nationals, and then rapidly embarked on a policy of linking emigration policy with the country's economic development. Although with different national histories and specificities, all of the Mashrek has had extensive involvement with emigration over the last three decades. Most of this has been temporary labor migration to other Mashrek countries, and primarily to GCC countries. The common characteristics can be summarized as the following:

- Mass temporary and permanent emigration since the 1970s.
- Economic development strategies have been linked with diaspora and remittances.
- Forcible return of migrants, from the GCC states during the first Gulf crisis, has created serious economic problems.
- Demographic structure now requires even more job creation for young people.
- Brain drain is significant for all Mashrek countries.

Brain drain is defined in the literature as emigration of more than 10% of the tertiary-educated population of a particular country (Richard, 2003).The traditional view sees international mobility of skilled workers as a zero-sum game between the nations. Since education is considered as a major determinant of long-term economic growth, (the large-scale) departure of well-educated workers from developing countries is detrimental to source countries and loss to the state in terms of its investment in education. Furthermore, as skilled labor is instrumental in

attracting FDI and foster R&D expenditures, the mobility of human capital is contributing to the concentration of economic activities in specific locations at the expense of origin regions.

The loss of skilled people imposes different kinds of cost the most obvious one is the cost of education itself which in most cases has been subsidized by the state. Losses of skilled professionals may in some cases be a net developmental loss when dire economic mismanagement and poor working conditions and low level of reward conspire with opportunities abroad lead to endanger sectors of an economy. According to this view, therefore, the negative development impact of such poor countries must be mitigated by support for education and training in the countries particularly in fields where needed skills are in short supply.

Recently however, this traditional view is challenged by new counter arguments which ask whether the detrimental effects stressed in the early literature may be offset by potentially beneficial effects emphasised in more recent contributions (remittances, return migration, creation of trade and business networks, and possible incentive effects of migration prospects on human capital formation at home). It is stressed that these beneficial effects or "positive externalities" on source countries should be taken into account in economic calculations; and in spite of the problems posed, a realistic response requires abandoning the brain drain approach of trying to keep the highly skilled at home.

In the brain drain debate, one of the key figures used is the ratio of the educated migrants within the migrant population. One striking fact is that the tertiary educated migrants are a small portion of the overall migrant population, especially in large migrant sending countries such as Algeria, Morocco and Tunisia. For example, between 10-15% of migrants have tertiary education in Tunisia, Morocco and Algeria as of year 2000. On the other hand, more than 50% of migrants to OECD countries from other countries, including Egypt, Iraq, Lebanon and Jordan have tertiary education.

The data available reveal that the migrants from almost every developing country are more educated than the native population. There are many reasons for this selection effect – the migration policies of the receiving countries are biased towards educated migrants, they face fewer constraints in terms of financial and social costs when they migrate, the returns to migration are higher etc. The selection effect is stronger for some countries compared to others. For example, among the countries in the region, Turkish migrants are the most similar to native population in terms of education profile – around 10% of natives and migrants have tertiary education. Similarly, the bias is relatively small for North African countries such as Morocco and Tunisia. On the other hand, the bias is largest for the GCC countries and Egypt – over 60% of migrants have tertiary education as opposed to 15% of the native population.

The most important question in the brain drain debate is what per cent of the educated population migrate. It is possible that educated migrants form a large portion of the migrant population. However, if the underlying native population is also highly educated, then the economic impact of migration is not likely to be negative on the sending country. For example, this is the case in India and China. Even though majority of Indian migrants, especially to the US, have college degrees, they still present a small portion of the educated labor force in India.

2.1.5. Educational systems and labor supply: The skills mismatch

Education has been recognized by all countries in the region as the cornerstone of sustainable social and economic development. However, there has been little progress in reforming and restructuring education to produce an educated, creative, flexible workforce, characterized by technological competencies and marketable skills, able to adapt to fast-changing technologies, economies, and innovations.

Since the 1960s, the countries of the region have made considerable investments in education. In 1997 their spending on education was estimated, on average, at 5.4% of their GNP. This commitment has paid off, for school life expectancy in the region grew between 1960 and 1985 by 2.5 years on average, and many of the region's countries are now close to the objective of universal primary education. However, in the absence of a comprehensive educational policy, this increased spending has not resulted in improvements in quality or efficiency in the educational system[5].

In an age of knowledge intensity, poor knowledge acquisition, let alone its production, is a serious shortfall. A telling indicator of the poor level of educational attainment in the Arab countries is the persistence of illiteracy rates that are higher, and educational enrollment rates that are lower, than those of dynamic less developed countries in East Asia and Latin America.

Indeed, while education has made headway among the younger generations, illiteracy has proved difficult to eradicate and the overall educational achievement among adults in Arab countries remains low on average. Arab countries have nevertheless made tangible progress in improving literacy: the estimated rate of illiteracy among adults dropped from approximately 60 per cent in 1980 to around 43 per cent in the mid-1990s. However, illiteracy rates in the Arab world are still higher than the international average and are even higher than the average in developing countries. Moreover, the number of illiterate people is still increasing, to the extent that Arab countries embark upon the twenty-first century burdened by over 60 million illiterate adults, the majority of whom are women with the largest concentration being in rural areas.

The mid-1990s witnessed higher total enrollment rates for the secondary and tertiary levels in the Arab countries (54 per cent and 13 per cent, respectively) compared to developing countries (49 per cent and 9 per cent, respectively). However, these percentages are lower by far than those prevailing in the industrialized countries for that period (106 percent[6] and 60 percent, respectively). Accordingly, Arab countries are not expected to catch up with the industrialized countries' mid-1990s enrollment levels for all three levels of education before 2030.

Educational output and student achievement have remained below acceptable standards. Textbooks and teaching methods are, for the most part, outdated and do not take into consideration the technology-dependent world students will face upon graduation. This indicates

[5] It is important to note here that not all countries in the region suffer the same ills in education. While there are general deficiencies in different areas to greater or larger extents, there are also models of excellence and success stories in some countries, and pockets of weakness and strength within the same country. Both at the general and higher education levels there are a number of distinguished and reputable schools and institutions that can be used as models. What is lacking is a system that governs education and sets measurable standards of performance.

[6] A gross enrollment rate may exceed 100 per cent, if there are students enrolled in a level who are younger or older than the age span for that level

a lack of planning and the absence of clear long-term goals. Additionally, in most countries, education spending has been ad hoc and inconsistent varying greatly from one year to the next and from one area to another. The expenditures made have not been used wisely and the investment has failed to pay off.

Moreover, there are indications that rising expenditure on education in the Arab world began to taper off after 1985. Education spending increased, in current prices, from $18 billion in 1980 to $28 billion in 1995. However, the rate of increase since 1985 has been much slower than that during the period 1980-1985, unlike the situation in both developed and developing countries. On the basis of the rather defective indicator often used in international comparisons (education expenditure as a percentage of Gross National Product) Arab countries do better than developing and developed countries alike and the percentage was on the rise between 1980 and 1985. However, the percentage was lower in 1995 than in 1985.

A better indicator is per capita expenditure on education. At current prices, this indicator rose over the years from 1980 to 1985. However, this rise was followed by deterioration during the latter half of the 1980s. While Arab countries continued to spend more on education per capita than developing countries as a group, their relative edge has been eroding since the mid-1980s. In addition, per capita expenditure on education in Arab countries dropped from 20 per cent of that in industrialized countries in 1980 to 10 per cent in the mid-1990s.

The absence of proper educational planning and goal setting is also evident in the lack of compatibility between educational goals and individual and social development needs, on the one hand, and the demands of the labor market, on the other. In most publicly funded schools in the region, educational curricula are outdated and heavily dependent on rote learning and theoretical information. Subject matters tend to have little relevance to the real world. This is true of the general, vocational and higher education systems to varying degrees.

At the vocational level, training programs are supply-driven rather than demand-driven and do not correspond to the needs and realities of the labor market. In most countries of the region the vocational training system lacks comprehensive national strategies compatible with the labor market and the needs of the new, technology-driven global market, which often means that vocational training institutions will produce workers with no jobs to fill. Vocational training, also suffers from not being accorded the prestige that is given to higher education. Therefore, students who opt out of the academic system to join vocational training programs are faced with under-funded programs, technologically irrelevant and out-dated courses, outmoded facilities, insufficiently trained instructors and no reliable methods of assessing and evaluating the standards, quality and relevance of programs and courses. In most cases students have not received proper guidance or career counseling and have no idea about the future employment prospects in any given vocation.

With the exception of Egypt, Libya, Bahrain, and Syria the proportion of upper secondary students enrolled in vocational or technical subjects is less than 30% of the total secondary enrollment. In most countries of the region (for example, Morocco, Tunisia, Kuwait, Saudi Arabia, Qatar, United Arab Emirates, Sudan, and Yemen) the proportion of secondary enrollees in technical or vocational education falls below 20%. The global average for 2005 is approximately 17% of upper secondary enrollments, although Developed world approaches 52%.

<Insert **TABLE 14:** Unemployment by level of education>

<Insert **TABLE 15:** Enrollment in vocational education >

Accordingly, while great numbers of unemployed youth in the Arab region actively seek work, critical shortages of qualified workers continue to exist. As local industries explore new and innovative lines of business, they demand workers with a strong work ethic, entrepreneurial mindsets, and cutting-edge professional and technical training. Educational systems, however, have proven inadequate in meeting this need, and first rate professional and technical schools are virtually nonexistent. As a result, the cycle toward human development comes to a standstill: young people sit idle without quality jobs or a promising future, and employers are unable to expand their operations to spark the economic growth necessary for the creation of a viable middle class.

<Insert **TABLE 16:** Youth unemployment>

The awareness in the region of the importance of education and its central role in achieving sustainable human and social development and a competitive edge on the global market has not been matched by the provision of the tools necessary to set effective policies and put in place implementable goals and strategies to achieve it. Indeed, some of the most significant reasons for many of the ills that plague the educational system at all levels in the Arab region are the lack of information and education management information systems, on which to build coherent policies and decision-making strategies, the lack of proper systems of accreditation, and the mismatch between educational output and the labor market.

Low labor productivity

Consequently, growth in Arab countries has been seriously hampered by low and declining labor productivity. According to World Bank data (1998/99 World Development Report), GNP per worker in all Arab countries combined was less than half that of two comparator developing countries: Argentina and the Republic of Korea.

Dividing Arab countries into three groups (each of which accounts for about one third of the Arab workforce) according to the share of oil in GNP sharpens this picture:

- In the first group of nine Arab countries that are richest in oil resources, productivity barely exceeds half the level in the two comparator countries;
- for the middle group with respect to oil's share in GDP (Egypt, Syria, and Tunisia), productivity is less than one sixth of the comparators';
- in the oil-poor Arab countries (Djibouti, Jordan, Lebanon, Mauritania, Morocco, Somalia, Sudan, and Yemen) it is less than one tenth.

This result suggests that excluding the effect of oil revenues might reduce productivity estimates for Arab economies to a greater extent than the simple overall comparison given above.

More important than measures of the level of productivity, however, are measures of changes in it over time. World Bank estimates of total factor productivity in the MENA region showed a steady decline (-0.2 per cent a year) from 1960 to 1990, compared to rapid acceleration in other parts of the world. Data from the 1998/1999 World Development Report permit comparisons of GDP per worker in nine Arab countries with that in faster-growing developing countries during the periods 1980-1990 and 1990-1997. On this basis, annual productivity is estimated to have risen by 15 per cent in China, 8 per cent in the Republic of Korea, and 6 per cent in India but only 4 percent in the Arab countries.

Low levels of growth and productivity can be partly explained by the fact that Arab countries lag behind faster-growing developing countries in a key human-capabilities variable: years of education. A comparison with the three Asian Tigers is revealing. In 1960, per capita output in Arab countries was higher than that of the three Tigers. The latter were, however, more advanced in terms of years of education, with a difference in educational attainment of around three years. Over the period 1960-1992, the difference in educational attainment actually doubled, to six years. Not surprisingly, GNP per worker in Arab countries dropped to less than half of that in the Republic of Korea.

<Insert **TABLE 17 and 17':** GDP per person employed (1980=100)>

At the sectoral level, the United Nations Industrial Development Organization (UNIDO) provides comparative data for the industrial sector. Industrial labor productivity in the region (proxied by the organization's North Africa and West Asia region) was estimated in the early 1990s to be roughly the same as in 1970 (when it had been close to European and Japanese levels). In the face of rising productivity elsewhere, this has meant a significant relative decline. According to UNIDO, Arab industrial labor productivity per worker fell as a percentage of the North American level in constant 1985 dollars from 32 per cent in 1970 to 25 per cent in 1980 and 19 per cent in 1990. It is noteworthy that the decline took place after the oil boom, which started in 1974, after an investment of $2,000 billion in gross fixed-capital formation by 1992, and after a massive expansion in educational systems at all levels.

Low returns to education

Rates of return to education give synthetically a measure of the net benefits associated with investment in further education. Costs and benefits from that investment depend on the increased earnings obtained in the labour market when the individual attains a higher level of education. Expected wages represent the returns to education and they establish a link between labor market prospects and schooling decisions. However, in situations of high unemployment, like the Arab region case, education becomes an investment decision subject to uncertainty and expected wages

should be weighted by employment expectations. Both the costs and the benefits of education are unsure and the final decision may be completely different from that taken under certainty[7].

Casual evidence but also survey results seem to show that employment expectations play a nontrivial role in the educational investment decision. Indeed, holding wages constant, higher unemployment in the present makes schooling more attractive because it is less likely that a wage is lost. Higher unemployment reduces the opportunity cost of education. Similarly, higher future unemployment reduces the benefits of education and therefore it discourages enrolment.

In this context, some contributions should be mentioned, though. Nickell (1979) adjusts rates of return by introducing unemployment because "*we shall be underestimating the private rate of return to the extent that the individual will only be in receipt of those earnings for some proportion of the time where the proportion is directly related to schooling*". Groot and Oosterbeeck (1992) estimate the effect of unemployment on the level of rates of return to education, while Asplund et al. (1996) reformulate the earnings equation to allow for the introduction of unemployment. In all these cases, when unemployment differentials are taken into account, returns to education increase, in general, at all levels.

The latest compilation of the rate of return to education for a large number of countries in the world is provided by Psacharopoulos (1994). The compilation is based on results using one of the three standard methods for estimating the rate of return to education: the "full method" of calculating the rate of return, the "basic Mincer" earnings function, and the "extended" earnings function. In this compilation, the results pertaining to the Arab world are both limited in coverage and outdated. Of seventy-eight results based on the full method, only five were for Arab countries. The Arab countries involved were Morocco (with results for 1970); Somalia (1983); Sudan (1974); Tunisia (1980); and Yemen (1985). Of sixty-two results based on estimating a Mincer earnings function, only three were for Arab countries; Kuwait (with results for 1983); Morocco (1970); and Tunisia (1980).

[7] Rees and Mocan (1997) has attempted to study the effects of unemployment on different types of schooling decisions. The authors use panel data analysis to investigate the role of unemployment in explaining high school dropouts. The study find a positive effect of unemployment on education participation, reducing dropouts. Micklewright et. al. (1990) find a positive effect of unemployment on early school leaving while the time series analysis of Withfield and Wilson (1991) yields the opposite answer to the same question. Frederiksson (1997) obtains a very small effect of unemployment clearly inferior to the role played by wages in explaining the demand for Higher Education. Other papers concerned with youth living arrangements have also found differing effects depending on specifications. Fernandez and Shioji (2000) have proposed a plausible explanation for this diversity of findings. According to the authors, unemployment could have two different effects on enrolment decisions. The one, called ***investment effect***, works solely through changing the costs and benefits of education. A high current rate of unemployment for non-graduates encourages enrolment by lowering the opportunity cost of education. In the same way, the expectation of a high rate of unemployment of graduates upon finishing the degree discourages enrolment by reducing the benefits of education. Furthermore, given the intertemporal nature of schooling decisions, serial correlation in unemployment rates boosts both effects. So long as high rates of unemployment are expected to occur in the future following today's observed ones, then the investment effect will be at work. Most previous studies consider implicitly or explicitly the investment effect. However, given the inconsistency of results, this effect alone does not seem to give a sufficient explanation to the empirical relationship between unemployment and enrolment. This is why the authors introduce the other type of effect, called ***wealth effect***. Higher unemployment rates will make households poorer in general. In the presence of financial market imperfections, investments in education will be negatively affected by the lack of income. Thus, unemployment could unambiguously reduce enrolment if the wealth effect predominates.

<Insert **TABLE 18:** The Coefficient on Years of Schooling. Mincerian Rate of Return>

As Birdsall and O'Connell (1999) have noted, "returns to education differ by level more in MENA than in any other region," with demand for primary grades much lower, due to education quality and labor demand, than for secondary and tertiary levels, where graduates have relied on rent wages in the public sector for four decades.

Ali (2003) have provided estimates of the returns to education, at different levels, in a sample of six Arab countries: Jordan, Kuwait, Mauritania, Morocco, Oman and Yemen. The results at each education level are lower than those reported for a typical developing countries; the average rate of return for the six considered countries was found to be 7.3 percent below that of the world average of about 10 percent. Furthermore, the rate of return to education do not seem to conform to the general world pattern; the returns to education tend to increase by level confirming the distortions characterizing the education systems in the region that predominantly show a systematic bias toward higher at the expense of basic education.

Sectoral demands within the higher grades also contribute to the mismatch of returns to education in the Arab economies. Traditionally, Arab societies value professions like medicine and law above technical and vocational sectors, often looked upon with disdain. Hence, little demand exists for funding vocational and technical education.

2.2. Labor demand considerations

2.2.1. Structure of Arab Economies

Input of labor in production process depends upon technology used, and technology used varies across the industries. Traditional agriculture is more labor intensive than the modern manufacturing industries. With the modernization of economy, share of agriculture in workforce reduces due to two factors: food demand grows at a much slower pace at high levels of income, which moderates the demand for food-grains, and the technology used in agriculture, at higher yield levels is much less labor absorbing than traditional agriculture.

At all Arab countries level agriculture absorbed 34 to 29 per cent of workforce between the years 1995 and 2005. Thus, the proportion of workers getting work in agriculture came down by 5 percentage points between 1995 and 2005. The shifts in ability of agriculture to absorb labor are more substantial than the average in five countries which represent 56 per cent of workers in the Arab region: Yemen, Sudan, Oman, Morocco and Egypt with respectively 10, 8.8, 8.6, 8 and 6.8 percentage points less in 2005 than in 1995.

<Insert **TABLE 19:** Agricultural labor among workers>

Though, the share of agriculture in the total employment has been declining over the years, the path of this decline has been faster than the decline in the share of agriculture in the GDP (2 per cent in average between 1995 and 2005). As a result a clear divergence has emerged between the shares of primary, secondary and tertiary sectors in employment and output, suggesting thereby relatively large intersectoral differences in the per worker productivity.

< Insert **TABLE 20:** Agriculture, value added (% of GDP)>

The secular decline in the importance of agriculture sector in the overall economic structure is a part of economic development. Work Opportunities that are lost in traditional agriculture have to be replaced by work opportunities in some other sector. In the normal course it is the secondary sectors (manufacturing) that grow much faster than agriculture during transition of an economy. However, in the post reform period the growth of manufacturing industries has been constrained by competition from imports. Thus, in the medium term, the ability of manufacturing sector to replace the work opportunities lost in traditional agriculture is rather limited over the next 5 to 10 years.

In most Arab countries, the shift from a rural agrarian society to an urban industrial society involved widespread social and economic disruption, unevenly distributed employment and sometimes higher unemployment.

The industrial sector in the Arab Region has been significantly influenced during the last two decades by two major factors:

- Petroleum and gas industries are the main source of national revenues in 13 countries and capital for investments in the other sectors of their economies; these vital revenues depend on the international oil price fluctuation.

- The inherent weakness and slow growth rates of the non-petroleum manufacturing industries (Unified Arab Economic Reports, 1993, 1999).

The percentage of labor in extractive and in manufacturing industries has not increased significantly over the decade. It could even be claimed that it has declined due to the increasing share of the service sector. Furthermore, as the population has been increasing dramatically, industry did not contribute significantly to the creation of new job opportunities.

2.2.2. Employment generation and productivity growth

Assume a national production function that is Cobb-Douglas with a constant return to scale:

$$Y = AK^{\alpha}L^{1-\alpha}$$

The equilibrium condition in the labor market is the marginal product of labor $\frac{\partial Y}{\partial L} = A\left(\frac{K}{L}\right)^{\alpha} = \frac{w}{p}$ the real wage, and A an index of total factor productivity (TFP). The rate of growth of employment is then:

$$\dot{L} = \left(\dot{A} + \alpha \dot{K} - (\dot{w/p})\right) \Big/ \alpha$$

where $\dot{L}$ is the rate of growth of employment, $\dot{A}$ is the rate of growth of TFP, $\dot{K}$ is the rate of growth of the capital stock, which depend largely on the national investment rate, and $\dot{w/p}$ is the

rate of growth of the real wage. The rate of job creation is then increased by additional investment with which labor is complementary and decreased by any growth in the real wage firms pay. Also, greater growth in TFP increases job creation as it increases the marginal product of labor.

Therefore, there is a close connection between job growth, capital accumulation, and productivity growth. Insofar as an absence of interaction with the world economy reduces total factor productivity growth, it slows not only the rate of growth of aggregated supply but also the growth of employment. Similarly, high levels of technological absorptive capacity, facilitated by specific types of higher education, are also critical to increasing the growth rate of TFP.

The assumption is that aggregated demand increases sufficiently rapidly to absorb the new output. On the other hand, the growth of real wages, for a given worker productivity, limits the additional profitable jobs that the firm can offer. This imply that the substitution of labor for capital, which would require lower real wages relative to the cost of capital, is precluded though in principal this substitution would be possible. Such substitution would also reduce the investment requirement.

Given the push to increase the female labor force participation rate, and the need to reduce the very high current rates of unemployment and/or underemployment, the number of jobs created likely will have to increase by more than 3 percent per year for most Arab countries[8]. Table 21 shows some combinations of variables that allows the realization of the desired employment growth rates of 3.5 and 4 percent as a benchmark, and a 2 percent growth rate of real wages. In this exercise it is assumed that the initial capital output ratio is 3, reflecting the experiences of some Arab countries during 1995-2000, and the depreciation rate of the fixed capital stock is 5 percent per year given that capital stock evolves as follows:

$$K_t = I_t + (1-\delta)K_{t-1},$$

where I is investment and δ is the fixed capital stock depreciation rate.

As has been documented in Collins and Bosworth (1996), the share of capital in developing countries, the Arab region members being among them, is much higher than the frequently used share of 0.3-0.4. The estimated share for the MENA regions was found to be in the range of 0.5-0.7 (Senhadji, 2000 and Limam *et al*, 2007).

< **TABLE 21:** Alternative Scenarios for Labor Force Absorption>

The calculations show that with a TFP growth equal to 0.1 percent per year, capital share of 0.5, and for employment to grow at 3.5 percent per year, the required investment rate is 34.5 percent, dropping to 25.5 percent when TFP growth is 2% and rising to 40.5 percent when TFP growth is -0.5 percent. For employment to grow at 4 percent, consistent with the IMF's higher labor force growth projection in the region, an important increase in the investment rate would be necessary (between 27 and 42 percent).

[8] A World Bank study argues this increase is 3.5 percent, and another by the IMF concludes that it is 4 percent; World Bank (2004) and Dhonte , Bhattacharya and Yousef, (2000)

According to Limam *et al* (2007), countries such as Algeria, Jordan, Kuwait, Libya and Sudan had negative TFP growth[9]. In these countries, the investment requirements to absorb the rapidly growing labor force will be exceptionally high. Even in the case of the oil exporters of the GCC, simple job creation may not be enough; they have to be jobs that nationals are prepared to take.

Thus there is a need for greater domestic saving to finance investment and/or greater productivity growth, neither of which will be easy to achieve given the deep political uncertainty characterizing many of the region's regimes and uncertainties about the future price of oil. If such saving and investment were to materialize, and both capital stock and employment grew more quickly, the aggregated output would also increase more rapidly. The last column of table 21 showed the implied rate of growth of aggregate supply under the various assumptions (5.5 or 6 percent per year).

2.2.3. Barriers to investment

McCall (2004) reviewed private sector investment in some Arab countries (as a principal sub-group of MENA region) and identified four significant barriers to private investment in the region:

1. ***Lack of ownership diversity***

In most Arab countries, there is a large degree of state ownership of assets. This structure has several negative implications on an economy. Direct consequences include a slow innovative process of government-owned enterprises, the inability for industry to adapt to new trends, slow expansion and low technological expertise. Furthermore, state-owned companies are subject to government funding, direction and discretion that can hamper growth and transparency. Indeed, studies indicated that while investment is necessary for growth, the quality and efficiency of such investment is the critical factor. The Arab region has comparable levels of investment and high savings growth rates versus other regions, including East Asia, however the quality of investment and returns to productivity has lagged.

The ratio of private investment to public investment is only at 2 in most Arab Countries, versus 6 in OECD countries, and 5 for most of SE Asia. The high percentage of family and public ownership is one prohibiting factor. Additionally, the close relationship between banks and the government is often cited as a constraint on credit availability and lacks sufficient transparency.

Moreover, the heavy public sector in the Arab region often provide inefficient and costly services, raising the cost of exports and limiting the returns, and thus diminishes its attractiveness to international and domestic private investment. Privatization in these sectors will also help to facilitate trade and investment in related sectors, such as tourism and technology sectors.

[9] With reference to the Arab countries, Sala-i-Martin and Artadi (2003) point out that low TFP growth shows ineffectiveness of investments due to three fundamental causes: social and political instability; excess of regulations and the presence of heavy public intervention discouraging private investments; poor quality of the human capital. As expected, these factors affect in the negative both domestic and (more even so) foreign investments.

2. Insufficient diversification of the economy

The small size of many of the financial markets is partly due to the lack of both small and large diversified and regional companies. Only 8% of Arab trade is conducted within the MENA region, highlighting the region's dependence on Europe, Asia and North America for many of its goods. Moreover, as highlighted in the previous sections there is an urgent need to create employment, most of which cannot be provided from the oil sector and must come from other industries, such as tourism, manufacturing and services. The size of the combined MENA market region is 370 million, but the inter trade is quite low, mainly due to a lack of products, as well as lack of conducive regional trade agreements.

In the GCC states, over two thirds of the population are under 25 years, and 21 percent are between 11 and 15 years old. Jobs are urgently needed for the young nationals as the oil sector provides relatively few jobs. Growth is historically not sufficient to create new jobs to absorb the rapid expansion of the labor force. IMF studies indicate that in economies that derive a significant share of their income from oil, the large size of the government sector has been the overriding problem, stifling private sector growth and making it hard to diversify production.

Increasing the diversification of the economies as well inter-regional and international trade is a must not only due to employment issues but also for the Arab region to keep pace with an increasingly competitive world market.

3. Inadequate transparency and regulation

Governance and transparency in the region is varied and it is difficult to generalize specific reforms and policies. However, there are several common qualities that most countries share including; a general lack of freedoms, low transparency in business and government polices transactions, and a lack of full accountability. This includes proper recourse for transactions by both domestic and international parties in a court of law, as well as the formation of parliaments and representative governments.

4. Underdeveloped capital markets

In most Arab markets, banks are still overwhelmingly local and lack a pan-Arab presence. There tends to be little competition locally, and many banks are still state-owned. Despite the existence of private banks, competition is not actively encouraged. Product innovation is low, although this is changing in some countries.

The corporate bond market is in its infancy in most Arab countries, further hampering the financing of corporate expansion. This also forces would be creditors into the hands of the banking system, which further enhances the power of the banking system and the control of credit by strong state or private banks. Furthermore, the capitalization of the equity markets is low, consisting of a limited number of companies, and offer very poor liquidity. High liquidity is needed to attract both large domestic and international investors. Efforts to increase the size, liquidity and product offering of the local markets are in progress but are often hampered by cumbersome regulations and requirements.

2.2.4. Low capacity to attract FDI

Over the last ten years, FDI have significantly increased both in absolute and relative terms. Between 1980 and 2004, FDI flows in the world went from 55 to 648 billion dollars. The highest growth rate took place in the second half of the 90s; after which, the flows started decreasing. Rates recorded at the end of the period under consideration appear, however, to be distinctly above any previous ones. Arab countries' performance, however, appears to remain distinctly below that of many other developing economies or emerging countries. In particular, the growth of FDI flows proves to be notably inferior to that recorded in the EU new members or in the big rapid growth Asian economies, such as China and India.

Between 1995 and 2004, the MENA received, on average, FDI for little more than 8 billion US dollars, as against 17 billion dollars of the new EU member countries. The MENA received 1,2% of the world's total flow of FDI, China and India as a whole got 8%, while 25 EU countries got around 43%. Moreover, most of the limited FDI flows go only to a handful of countries and specific sectors. More than 80 percent of FDI stock is concentrated in five countries – Saudi Arabia (34 percent), Egypt (22), Tunisia (14), Bahrain (7) and Morocco (7). The same five countries also have the highest average annual FDI flows. In terms of sector distribution, the bulk of the region's FDI is directed predominantly to petroleum-related and other natural resource activities. Some other countries such as Bahrain, Egypt, Morocco, Tunisia and Lebanon have witnessed FDI inflows into various sectors such as tourism, banking, telecommunications, manufacturing, and construction. Some of these non-hydrocarbon sector FDI flows were ushered by cross-border mergers and acquisitions, particularly of privatized firms.

At the country level, the flows and stock of FDI remain a small part of the respective economies, both in terms of the gross fixed capital formation (5 percent on average – Bahrain 74, Kuwait 1.4 of FDI stock)) and the gross domestic product (14 on average – 3.9 UAE, Bahrain and Tunisia above 20).

Although intra-Arab investment is likely to be understated in international FDI statistics, it comprises a significant proportion of FDI inflows (more than half of the total FDI inflows). In some cases intra-Arab investment is considered domestic investment. Private capital flows from the GCC to other MENA countries are a potentially significant source of future private investment. High net worth citizens of the GCC states have invested roughly $1.2 trillion (about 85 percent of their wealth) abroad, mostly in the United States. Also notable is the considerable amount of outward FDI flows and stock in the Arab world. Kuwait has a much higher outward FDI stock ($1.98bn) than inward FDI stock ($527 mn) as of 2000. Despite their familiarity with economic conditions in MENA and willingness to take a fresh look at investment opportunities at home, these elites have diverted only a trickle of their wealth back into the Arab world because they cannot find ways to invest it productively at home.

Research shows that there are at least three main reasons at the basis of this relatively low capacity of the MENA in general and Arab countries in particular to attract investments:

1. The small size of local markets and the lack of real economic integration inside the MENA. As we shall shortly see, the economic dimension of the MENA is relatively small, while trade integration among the southern countries (the Agadir agreements between Morocco, Tunisia, Egypt and Jordan) is not yet strong enough to enlarge the dimension of the potential market.

2. The second reason may be traced back to the changes in the scenario of international competition. Eastward EU expansion along with the rapid growth of some big economies in Latin America, China and India, have provided new opportunities for international investors.

3. Thirdly, economic and trading reforms in the MENA have been slow and mostly insufficient, while restraint of investments along with the inadequacy of its institutional and legal framework only add to the low attractive capacity of the region.

3. Employment Programs and Employment Policies[10]

3.1. Active Labor Market Policies

The steady rise in unemployment rates in the 1970s and 1980s in Europe has been variously attributed to mismatches between labor skills demanded and supplied, excessive wages vis-à-vis productivity levels, over-generous out-of-work benefits, and rigid institutions. Among the possible solutions was the introduction of government policies to better mold labor force characteristics to changes in demand, to lower firms' labor costs directly and to increase job-search efficiency. These policies have been grouped under the label of Active Labor Market Policies (ALMP).

The ALMP reflect the increasing consensus among policy makers that actively assisting the unemployed in job search is preferable to simply providing them with passive income support. The danger is, so the argument goes, that reliance on passive income support may reduce work incentives and job-search activities and therefore increase the risk of long-term unemployment. ALMP are seen by many as the key to minimize these risks.

Calmfors (1995) distinguishes four basic functions of ALMP: raise output and welfare by putting unemployed to work or have them invest in human capital, maintain the size of the effective labor force by keeping up competition for available jobs, help to reallocate labor between different sub-markets, and alleviate the moral-hazard problem of unemployment insurance.

ALMP may eliminate mismatch in the labor market, promote more active search behavior on the part of the job seekers and have a screening function because they substitute for regular work experience in reducing employer uncertainty about the employability of job applicants. Placements in labor market programs may provide an alternative work test to the eligibility of unemployment benefits, since some of those who are not genuinely interested in work will prefer to lose registration rather than to participate in a program. An adverse side effect of ALMP is that

[10] I highly recommend the chapter prepared for the Handbook of Labor Economics, Volume III, by Heckman, LaLonde and Smith (1999), titled "The Economics and Econometrics of Active Labor Market Programs" and available on the internet at **http://athena.sas.upenn.edu/~petra/class721/hls.pdf**

workers are locked-in training and job-creation programs: because of their participation they reduce their search intensity.

Calmfors (1994) distinguishes a number of indirect effects which are also important when assessing the effectiveness of ALMP. First there are displacement effects since jobs created by one program are at the expense of other jobs. Then there are deadweight effects because labor market programs subsidize hiring that would have occurred anyway in the absence of the program. There are also substitution effects because jobs created for a certain category of workers replace jobs for other categories because relative wage costs have changed. Finally, there are the effects of taxation required to finance the programs on the behavior of everyone in society.

In line with the distinction between micro and macro effects there are two main types of evaluation studies of ALMP (Martin and Grubb, 2001). The first type uses micro data to measure the impact of program participation on individuals' employment and earnings. The second type uses aggregate data to measure the net effects of programs on aggregate employment and unemployment. Micro studies have the advantage of a very large number of observations. Drawbacks are the selection bias and the fact that they provide only estimates of partial-equilibrium effects. Macro studies are few. Drawbacks of macro studies are that they are based on few observations, they often lump together various types of training and job creation schemes and they have to deal with a simultaneity bias.

There are many evaluation studies. A lot of them are done in Sweden, a country that has used ALMP extensively. Heckman et al. (1999) give a detailed overview of several micro-econometric evaluation studies. They conclude that labor market programs have at best a modest impact on participants' labor market prospects. Furthermore, there is considerable heterogeneity in the impact of these programs, so for some groups of workers the programs are more effective than for other groups of workers. Finally, when programs are implemented on a large scale displacement and general equilibrium effects may be sizeable. This means that without incorporating them in a macro framework micro treatment effect evaluations will provide poor guides to public policy.

Calmfors, Forslund and Hemstrom (2001) conclude that the evidence on the effectiveness of Swedish ALMP is rather disappointing. Labor market retraining for example has no or negative employment effects. Martin and Grubb (2001) draw similar conclusions in their overview on what works and what does not work among ALMP in OECD countries. They conclude for example that subsidies to employment and direct job creation have been of little success in helping unemployed get permanent jobs. Kluve and Schmidt (2002) also present an overview of evaluation studies concluding that job search assistance can be useful, private sector subsidies are better than public sector programs and training programs can help to improve the labor market prospects of unemployed workers.

3.2. Programs and Policies Aiming to Enhance Employment Opportunities of Arab Youth[11]

Employment programs can be divided into three main categories:

(1) Interventions which impact the supply side of the labor market, e.g., education and training programs catering for young unemployed and displaced workers.

(2) Interventions seeking to impact the demand side, e.g. creating employment opportunities through supporting employers; increasing opportunities for self-employment and small businesses, and using job nationalization, wage subsidies, business incentives, micro-credit, public works and services programs.

(3) Interventions intending to improve the functioning and monitoring of the labor market, e.g., increasing job market information and employment database, providing job search assistance, supporting professional guidance, employment offices, and enhancing the coordination between the various employment promotion schemes.

The abovementioned programs have been adopted to varying degrees by the different Arab countries. Some of these programs are comprehensive and incorporate multiple training and employment activities, such as the Social Development Fund in Egypt; the Social Development Fund in Yemen; and the Employment Fund in Jordan. Other countries represent landmarks in certain components of employment policies such as the programs aiming at developing business and entrepreneurship initiatives in Jordan, Kuwait, and the United Arab Emirates; and policies aimed at improving labor market information and strengthening the role of placement offices such as in Tunisia.

3.2.1. Programs aiming mainly to develop the supply side:

Improving technical education and vocational training (TEVT):

New programs have been introduced, such as "dual-system" (programs which combine training and apprenticeships); joint public-private programs; and school-to-work programs (e.g., school enterprises and internships). However, in many Arab countries most of the vocational education is carried out at secondary school levels. Arab governments are the main providers of the TVET services, expect for Lebanon where the responsibility lies with the private sector. The private sector is increasingly contributing to this domain although its contribution has been modest in may countries (e.g., Egypt). TEVT has received, however, heavy cooperation and coordination from the business organizations in some countries (e.g., in Bahrain).

Outstanding attempts to upgrade the quality of TEVT programs in the region have been cited in many specialized reports, among which is a new technique, DACUM (Design A Curriculum). It is used by the Public Authority for Applied Education and Training (PAAET), the main provider of vocational education and training in Kuwait, to bridge the gap between the demand and supply sides of the labor market in skills and know-how.

[11] This section draws heavily from several reports among which are ILO (2004), Brandsma and Hart (2001) and ESCWA (2002).

Also significant developments are taking place in the TEVT system of Yemen. The Ministry of Technical Education and Vocational Training (MTEVT), through technical collaboration with the ILO, overhauled the Yemeni TEVT system.

The Skill Development Fund (SDF) and several joint publich-private collaborations were established and the government is gradually expanding the capacities of the various training institutions.

Among the most important employment initiatives in the region is the Mubarak-Kohl Initiative (MKI), an apprenticeship scheme, launched in 1991 in order to initiate a structural change in the Egyptian vocational education and training system (VET). MKI is based on joint financial and technical collaborations of public and private organizations in order to provide intensive technical training programs to a limited number of trainees.

Similar projects are also taking in Saudi Arabia. The Saudi Vocational Training Administration launched the National System for Joint Training (NSJT) in cooperation with the private sector. It provides mostly enterprise-based training.

The Tunisian government, being the body responsible for the TVET system, has created since the early 1990s many institutions to lift the role of TVET in employment.

The Tunisian government has also taken several measures to improve TVET in the country including legislating training levy to support vocational training, performing apprenticeship training through training contracts, building up vocational formation map, and vocational formation of women in rural areas.

Developing entrepreneurial attitudes and skills:

One of the most significant initiatives in this domain is INJAZ; a youth initiative funded by USAID that is now operating in several Arab countries, e.g. Jordan, Kuwait, Egypt, Bahrain, Lebanon, Oman, Palestine and Qatar. It aims at creating entrepreneurial culture and fostering business attitudes, creative and critical thinking, problem-solving and interpersonal communication skills within the youth. It also seeks to prepare an innovative and qualified generation of workers, in order to fulfill the private sector's growing needs for better labor quality.

Tax exemptions and Training Subsidies:

Some Arab governments have established business tax relief systems in order to encourage the participation of the private sector in enterprise-based training programs and employment promotion schemes. For example, Bahrain uses "Training Participation Levy schemes" to finance training, while compensatory incentives are proposed to encourage enterprise-based training in Egypt.

Informal training:

The Somali Education Incentives for Girls and Young Men (SEIGYM), supported by the Africa Educational Trust (AET), uses a "voucher system" which encourages disadvantaged youth to

gain essential reading and work skills. It uses a variety of informal education and training to give school dropouts a second chance to have a craft.

3.2.2. Programs targeting the demand side of the labor market

These include programs of self-employment, and enterprise development, micro-credit schemes, job subsides and job reservation schemes.

Micro-enterprise development and Programs of Self-Employment:

The Social Fund for Development (SFD) in Egypt, established in 1991, encourages the initiation of small businesses, especially among youth, through the provision of soft loans, as well as training, technical support, guidance and supervision. Another Egyptian program, The Desert Development Program, aims at reducing unemployment through enabling Egyptians to build a livelihood in lands transformed from desert into agricultural land.

In the United Arab Emirates, Mohammed Bin Rashid Established for Young Business Leaders encourages and facilitates the development of local businesses and entrepreneurial activity in Dubai through assisting, training and supporting SMEs run by UAE nationals. The Social Development Fund in Yemen has also outstanding achievement in the job creation domain, skill development, poverty alleviation and improving the quality of life particularly in rural areas.

Jordan has numerous schemes which support private business and investments. Examples of the Jordanian programs aiming at facilitating the establishment of new businesses and providing support to start-up enterprises are the information and Communication Technology Incubator which was launched by the Higher Council for Science and Technology, and "Empretec" which is UNCTAD's integrated capacity-building program promoting the creation of sustainable SME support structures to help promising entrepreneurs build internationally competitive SMEs.

In Oman, SANAD, a self-employment government program, focuses on enhancing business opportunities for Omani nationals, particularly skilled youth. It is also actively contributing to the Omanisation of the private sector.

In Tunisia, the FNE 21-21 and BTS established in 1993 and 1997, respectively, to facilitate the creation of small business especially for the jobless. In addition, the central bank of Tunisia manages the National Fund for the promotion of small craft businesses (FONAPRAM).

Access to credit:

In the United Arab Emirates, Al Tomooh, a small business financial scheme established by Emirates Bank, provides easy access to funding for small national enterprises owned by nationals. A variety of other schemes are available in Jordan (AMIR and the Jordan Loan Guarantee Corporation), Tunisia (the Tunisian Bank for Solidarity, BTS, and the National Fund for Employment, FNE 21-21). Kuwait (the Industrial Bank of Kuwait's subsidized loans for establishing small specialized businesses); and some other Arab countries among which are micro-finance programs, loan guarantee programs, venture capital funds and long-term assets procurement schemes.

Public works programs (PWP):

These programs are an important tool for transferring income to the poor segments of society, and for providing gainful jobs. They however do not improve the employment prospects of program participants in the long run. In Egypt, PWP established in 1991, is part of the Social Fund for Development (SFD) program. Its aim is to provide jobs through labor-intensive infrastructure projects in rural areas. Similarly, the SDF in Yemen since its creation in 1997 and until 2004, has generated 10.3 million temporary and 14.5 thousand permanent jobs.

It is estimated that PWP employs 0.4 percent of the labor force in Egypt, 0.1 percent in Yemen, 0.6 percent in Morocco, 2.3 percent in Algeria and 2.4 percent in Tunisia (World Bank, 2004). Youth are the primary beneficiaries of these programs.

Employment and wage subsidies

In Tunisia employment/wage subsidies represent more than 50 percent of the ALMP cost. Wage-supplements are also heavily used in many GCC countries to encourage the employment of natives in the private sector.

Job-Nationalization and Job-Reservation Schemes:

In many Arab countries, notably the GCC countries, labor nationalization programs which aim at replacing foreign workers with nationals through market-based and mandatory rules, are used.

3.2.3. Scheme intending to improving the functioning and monitoring of the labor market

Higher councils, committees and taskforces:

Recently, Bahrain established the Vocational Education and Training-Skills for Work Task Force. In Jordan, the Vocational Training Corporation (VTC) is a main player in the Jordanian training sector. Also, the Ministry of Education, the VTC, Ministry of Labor and other local and international organizations are actively developing the TEVT sector. Similar bodies are established in Saudi Arabia: the Work Force Council, and in Egypt: the Higher Council for Human Resources Development. Tunisia has organized a job insertion of young graduates in the labor market.

Setting occupational standards:

Linking jobs to specific skills will not only break the vicious cycle between overstated job specification and over-education, but will also improve the employment prospects of young graduates.

The Saudi Vocational Training Administration in collaboration with the private sector launched a scheme to establish approved national standards for occupational skill requirements. This initiative seeks to help educational and training programs in matching their programs' output with labor market demands. Egypt's Higher Council for Human Resources Development also is establishing a system of approving national standards and issuing licenses for various occupational skill levels.

Job-search assistance/employment services

One of the landmarks in the Arab countries in the field of employment services is the Tunisian National Employment Agency and Independent Work (ANETI), established in 1993 and changes name in 2003. Its main role through its 90 employment offices is to convey job information between employers and job candidates. In a given year, more than 300,000 job applicants register at least once in the ANETI offices, and more than 7 million use its internet services for consultation. In Egypt, the Ministry of Manpower and Emigration is actively working to improve job-placement offices.

Networking:

An empowering technique, especially for young entrepreneurs, is gaining access to business and other relevant networks which provide information and support. Examples of these networks include the Young Arab Leaders (YAL) Network, a Pan-Arab initiative launched in 2004 to grow a base of five hundred Arab leaders in the field of business, government, civil society, journalism, arts and academia. Another equally important initiative is the Young Entrepreneurs Organization (YEO), an international NGO established in 1987 and runs in several Arab countries.

Other national entrepreneurial network include Riyada in Dubai that is a monthly networking event which aims at promoting and encouraging entrepreneurship and increasing knowledge dissemination for local entrepreneurs.

< **TABLE 22:** Expenditures on Active and Passive Labor Market Programs in Selected MENA Countries, 2003>

4. Conclusion

The Arab world is confronted with an increasing pressure coming from the supply side of the labor market, generated principally by the unemployed persons looking for a job, the new entrants on the labor market and the expected increase of the women labor force participation rate. This pressure is compounded by structural considerations relating to the slow labor productivity growth, low demand for skills, slow and erratic domestic investment growth, low attractiveness of foreign direct investment and high dependency on the dynamics of the international oil market as well as labor migration.

The high youth unemployment is certainly the most striking manifestation of the development crisis plaguing almost all Arab countries. It represents the major challenge. There are variations on the causes and the dimensions of the problem, and each country of this part of the world has its specificity that should be taken into account when addressing the unemployment question.

As such, in GCC countries, youth unemployment is fundamentally a supply problem as the products of the educational and training systems do not respond to the needs of the labor market. In the more diversified economies, without neglecting the supply side considerations linked among other to the mismatch between the quality of labor and the requirements of the emerging and fragile private sector, the basic problem seems to be a shortage of demand due to a slowdown of the growth process or/and a non-employment-friendly pattern of growth. Consequently, for the first group, the main issue is ensuring that entering cohorts of young nationals are able to find

appropriate jobs that match their skills and pay acceptable wages. For the second group, the main issue is creating enough jobs to accommodate entering cohorts.

Several specialists of development issues in Arab countries underline the non-existence among the economic policy leaders of a forward-looking strategic type of thinking, which aims at managing the future labor market conditions on the basis of a strategic intelligence matrix continually augmented by a systematic investigation and compilation of information relating to all the segments of the labor markets. Consequently, we cannot expect the development of a complete strategic plan aimed at identifying the features of an economic arrangement that can ensure a steady pace of development to create more than 100 million jobs in less than one decade. The lack of prediction and forecast management in general severely hampers the rational planning which sets precise perceptions for the methods and terms of the development in these Arab economies.

In contrast with the relative attention paid to macro aspects, there is insufficient empirical detailed evidence on the topic of labor market micro analysis, market selection process and firm productivity within this area of the world, the major constraint being the availability, accessibility and dissemination of labor force surveys and firm-level data. Confidentiality is most often used against accessibility of microdata and few Arab countries have a clear microdata dissemination policy. Shortage in data and its coverage necessitates the need for more effort to be done on data collection and dissemination which enables researchers to draw concrete inferences on the status and dynamic of youth unemployment in the Arab countries.

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Tables

TABLE 1: Population and Fertility Rate in Arab countries (thousands)

							Growth (*per cent)*		Fertility Rate	
	1950	1970	1980	1990	2000	2005	1950-1980	1980-2005	1950-1955	2000-2005
Arab countries										
Algeria	8753	13746	18811	25291	30463	32854	114,9	74,7	7,28	2,53
Bahrain	116	220	347	493	672	727	199,1	109,5	6,97	2,47
Comoros	173	275	387	527	699	798	123,7	106,2	6,33	4,89
Djibouti	62	162	340	558	715	793	448,4	133,2	7,8	5,09
Egypt	21834	35285	43860	55673	67285	74033	100,9	68,8	6,56	3,29
Iraq	5340	10112	14093	18515	25075	28807	163,9	104,4	7,3	4,83
Jordan	472	1623	2225	3254	4972	5703	371,4	156,3	7,38	3,53
Kuwait	152	744	1375	2143	2230	2687	804,6	95,4	7,21	2,38
Lebanon	1443	2390	2698	2741	3398	3577	87,0	32,6	5,74	2,32
Libyan Arab Jamahiriya	1029	1986	3043	4334	5306	5853	195,7	92,3	6,87	3,03
Mauritania	825	1262	1609	2030	2645	3069	95,0	90,7	6,3	5,79
Morocco	8953	15310	19527	24696	29231	31478	118,1	61,2	7,18	2,76
Oman	456	747	1187	1843	2442	2567	160,3	116,3	7,2	3,78
Occupied Palestinian Territory	1005	1096	1476	2154	3150	3702	46,9	150,8	7,38	5,57
Qatar	25	111	229	467	606	813	816,0	255,0	6,97	3,03
Saudi Arabia	3201	5745	9604	16379	21484	24573	200,0	155,9	7,18	4,09
Somalia	2264	3601	6487	6674	7012	8228	186,5	26,8	7,25	6,43
Sudan	9190	14699	19970	26066	32902	36233	117,3	81,4	6,67	4,45
Syrian Arab Republic	3495	6378	8978	12843	16813	19043	156,9	112,1	7,2	3,47
Tunisia	3530	5127	6454	8219	9563	10102	82,8	56,5	6,93	2
United Arab Emirates	70	225	1015	1868	3247	4496	1350,0	343,0	6,97	2,53
Yemen	4316	6327	8197	12086	17937	20975	89,9	155,9	8,2	6,2
Arab Countries	***76704***	***127171***	***171912***	***228854***	***287847***	***321111***	***124,1***	***86,8***	***7,0***	***3,8***
Less developed regions	1706698	2688915	3359755	4130947	4892218	5253484	96,9	56,4	6,17	2,9
World	2519470	3696588	4442295	5279519	6085572	6464750	76,3	45,5	5,02	2,65

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision, http://esa.un.org/unpp, 16 October 2006; 7:01:38 AM.

TABLE 2: Percentage aged less than 15 (per cent)

	1950	1970	1980	1990	2000	2005
Arab countries						
Algeria	40,1	48,4	45,9	43,1	34,1	29,6
Bahrain	42,3	46	34,6	31,5	28,2	27,1
Comoros	43,5	46,9	48	46,9	43	42
Djibouti	46,8	45,8	45,3	44	42,8	41,5
Egypt	39,7	41,4	41,4	41	35,9	33,6
Iraq	40,5	47,4	47,1	44,6	42,6	41
Jordan	45,7	45,9	49,4	46,8	39,3	37,1
Kuwait	36,2	43,4	40,3	36,6	26	24,4
Lebanon	34,3	42,4	38,1	35,4	30,6	28,6
Libyan Arab Jamahiriya	42	44,9	46,6	43,7	32,8	30,1
Mauritania	43,8	43,2	43,9	43,9	43,3	43
Morocco	44,4	47,6	43	39,7	33,4	31,1
Oman	42,3	47,8	45,6	44,1	36,4	34,5
Occupied Palestinian Territory	45,7	45	47,6	46,7	46,5	45,5
Qatar	42,3	36,7	32,4	27,7	26,2	21,7
Saudi Arabia	42	44,5	44,3	41,6	39,6	37,3
Somalia	41,3	45,5	46,8	45,4	44	44,1
Sudan	43,8	44,3	44,9	43,3	40,5	39,2
Syrian Arab Republic	41,5	47,8	49,1	48,1	40,3	36,9
Tunisia	38,9	46,3	42	38	30,3	26
United Arab Emirates	42,3	34,7	28,6	30	24,6	22
Yemen	42,3	48,6	50	51,7	48,2	46,4
Arab Countries	***41,3***	***45,1***	***44,3***	***42,7***	***37,8***	***35,5***
Less developed regions	30	32,6	27,4	26,6	22,4	21
World	26,8	28,2	24,4	23,8	20,2	19

TABLE 3 : Adult (15+) economic activity rate

Country	Year	Total	Men	Women	Source
Algeria	1977	36.7	71.8	3.8	Population census
	1985	38.1	69.4	8.5	Labor force survey
	1996	44.9	77.5	11.8	Labor force survey
Bahrain	1985	45.5	73.5	17.2	Official estimates
	1987	45.9	73.6	17.8	Official estimates
	2001	65.7	86	35.5	Population census
Comoros	1980	53.5	81.7	27.1	Population census
Egypt	1976	43.9	80.7	6.4	Population census
	1986	44.4	77.8	9.8	Population census
	1995	47.9	73.4	21.6	Labor force survey
	2002	43.2	68.7	18.4	Labor force survey
Iraq	1977	48.6	80.2	15.8	Population census
	1987	43.9	75.3	10.5	Population census
Jordan	1976	39.9	71.7	8.3	Labor force survey
	1991	41.3	69	11.5	Labor force survey
	1993	43.7	72.5	12.7	Labor force survey
Kuwait	1970	57.4	87.4	10	Population census
	1980	60.5	85.8	20.2	Population census
	1985	62.5	83.2	31.1	Population census
	1995	68	83.6	43.5	Population census
Lebanon	1975	44.6	73.8	15.4	Official estimates
	1997	46.8			Official estimates
Libya	1973	45.7	78	6.5	Population census
Mauritania	1975	48.5	94.6		Population census
Morocco	1971	45.6	80	12.6	Population census
	1982	47.2	78.3	16.9	Population census
	1990	49.6	74.9	25.1	Labor force survey
	1995	52	75.4	30.5	Labor force survey
	2003	51.9	77.4	27.3	Labor force survey
Oman	2003	55.3	76.9	24.6	Population census
Qatar	1986	75.5	93	27.5	Population census
	1997	72.9	89.2	33.4	Population census
	2004	77.1	91.7	40.6	Population census
Saudi Arabia	1992	53.6	80	14.5	Population census
Somalia	1975	64.6	92.7	37.5	Official estimates
Sudan	1973	54.9	89.1	21.6	Population census
	1983	57.3	85.2	31	Population census
	1996	51.3	74.7	29.1	Official estimates
Syria	1981	43.8	79.1	7.1	Population census
	1999	50.9	80.7	20	Labor force survey
	2003	47.5	75.3	18.7	Labor force survey
Tunisia	1975	51.7	83.6	19.5	Population census
	1984	50.8	79	21.9	Population census
	1997	48.6	73.4	23.7	Labor force survey
	2005	46.3	68.6	24.4	Labor force survey
United Arab Emirates	1975	73.3	93.3	10.2	Population census
	1995	75.2	92.2	31.3	Population census

(TABLE 3 continued)

Country	Year	Total	Men	Women	Source
Canada	1980	61.2	74.5	48.4	Labor force survey
	1990	67	75.9	58.4	Labor force survey
	2002	66.9	73.3	60.7	Labor force survey
France	1980	55.8	69.1	43.5	Labor force survey
	1990	55.9	65.9	46.7	Labor force survey
	2002	55.7	62.9	49.1	Labor force survey
Portugal	1980	61.6	79.6	46.2	Labor force survey
	1990	58.9	71.7	47.5	Labor force survey
	2002	61.8	70.2	54	Labor force survey
United Kingdom	1980	61.1	74.4	48.7	Labor force survey
	1990	63	74.4	52.4	Labor force survey
	2002	62.6	70.5	54.9	Labor force survey
United States	1980	60.8	73	49.6	Labor force survey
	1990	64.4	73.5	56	Labor force survey
	2001	63.2	69.6	57.2	Labor force survey

TABLE 4 : Labor Force and Population Growth rates

	Labor Force Average Annual Growth Rate		Women Economic Activity Rate		Average natural increase rate 1980-2005
	Per cent	Period	Per cent	Year	
Algeria	3,2	1982-2004	11.8	1996	2,3
Bahrain	3,8	1981-2005	35.5	2001	3,0
Comoros	2,2	1980-1991	27.1	1980	2,9
Egypt	2,6	1980-2003	18.4	2002	2,1
Kuwait	2,8	1980-1995	43.5	1995	2,7
Morocco	3,4	1982-2003	27.3	2003	1,9
Qatar	3,1	1986-1997	40.6	2004	5,2
Syrian Arab Republic	4,2	1983-2003	18.7	2003	3,1
Tunisia	2,6	1980-2005	24.4	2005	1,8
United Arab Emirates	6,0	1980-1995	31.3	1995	6,1

TABLE 5: Dependency Ratios

	1950	1970	1980	1990	2000	2005
Arab countries						
Algeria	80	110	99	87	62	52
Bahrain	82	94	58	51	45	43
Comoros	89	98	102	98	84	81
Djibouti	95	92	90	87	83	80
Egypt	74	84	83	82	68	62
Iraq	78	102	100	91	84	78
Jordan	102	96	111	100	73	68
Kuwait	64	82	71	61	38	35
Lebanon	71	90	77	70	60	56
Libyan Arab Jamahiriya	87	91	96	86	57	52
Mauritania	85	85	88	89	87	87
Morocco	90	107	89	77	61	56
Oman	102	94	104	100	100	94
Occupied Palestinian Territory	83	103	92	85	63	59
Qatar	84	62	50	40	38	30
Saudi Arabia	83	91	89	78	73	67
Somalia	78	94	99	93	87	88
Sudan	89	89	91	87	78	75
Syrian Arab Republic	85	104	108	103	76	67
Tunisia	80	100	84	74	56	47
United Arab Emirates	84	61	43	45	35	30
Yemen	86	104	109	116	103	95

TABLE 6: Proportion of Women in the Labor Force per age cohort (per cent)

	1980								2005							
	15+	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**	**15+**	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**
Algeria	25,5	31,5	25,2	22,8	22,3	21,9	24,9	39,5	44,2	42,7	44,5	49,7	46,1	43,0	34,0	28,0
Bahrain	11,9	22,5	12,1	11,8	9,5	6,5	2,1	0,6	23,0	37,7	23,4	31,2	22,8	18,3	2,7	1,4
Comoros	76,0	81,3	76,7	70,6	74,4	77,6	75,5	60,2	66,9	71,3	68,1	68,6	66,8	65,0	66,0	37,4
Djibouti	72,2	73,3	72,4	70,1	72,1	73,7	71,8	62,0	64,7	66,0	65,4	65,5	65,8	66,1	60,4	43,3
Egypt	23,7	15,9	23,3	21,6	27,0	30,3	17,7	33,7	27,8	42,5	28,0	31,6	26,3	22,5	12,2	16,6
Iraq	19,8	24,5	20,2	23,3	19,1	15,3	12,4	5,7	25,3	30,1	25,9	30,4	25,2	20,2	13,4	4,5
Jordan	21,8	34,2	22,2	22,2	18,0	14,8	14,3	8,3	32,4	40,6	32,7	35,2	31,1	27,1	20,7	14,2
Kuwait	14,6	23,0	14,6	17,6	13,4	9,3	5,3	6,0	34,0	58,3	34,2	41,6	32,5	25,2	11,7	2,7
Lebanon	39,6	35,3	40,3	52,0	45,4	40,5	20,6	18,8	43,6	31,3	45,3	54,6	52,8	51,4	20,4	12,4
Libyan Arab Jamahiriya	18,4	28,7	18,5	18,6	16,0	13,9	10,9	12,2	37,3	32,2	38,2	49,9	43,6	38,0	13,3	9,0
Mauritania	68,3	71,2	69,4	69,8	69,9	69,9	59,5	41,6	67,7	68,5	68,8	67,6	69,3	71,0	64,9	44,0
Morocco	27,3	35,0	27,8	26,3	26,0	25,8	14,0	13,1	34,1	34,1	34,7	37,1	36,2	35,5	21,9	16,1
Oman	17,2	22,4	17,2	15,6	15,7	15,8	16,4	19,8	19,6	28,7	19,7	23,1	18,2	13,9	10,2	11,2
Qatar	9,5	5,2	9,6	10,4	10,9	11,4	3,3	2,3	15,9	6,7	16,0	19,6	17,8	16,5	3,9	3,9
Saudi Arabia	8,6	6,9	8,8	10,7	9,7	8,5	3,5	2,6	17,9	15,5	18,1	25,0	19,6	15,2	4,3	2,8
Somalia	67,8	80,0	69,2	63,3	64,8	66,2	51,8	40,0	64,6	75,4	65,9	62,2	62,6	63,0	49,0	32,9
Sudan	36,8	41,6	36,7	32,2	34,1	35,7	38,6	38,1	33,0	39,3	33,1	32,5	31,4	30,4	30,8	30,5
Syrian Arab Republic	30,4	38,1	30,4	27,3	27,4	27,4	23,3	28,1	44,2	50,2	44,4	43,0	42,3	41,6	32,6	35,4
Tunisia	23,3	33,0	23,7	24,2	19,7	16,3	13,9	10,2	38,1	60,3	39,2	43,3	35,5	29,7	17,5	9,7
United Arab Emirates	5,3	6,2	5,3	5,7	5,2	4,3	2,8	3,3	15,5	23,2	15,5	18,6	14,6	11,1	4,5	3,1
West Bank and Gaza Strip	14,3	9,8	14,3	14,1	16,3	18,2	14,8	17,3	15,1	12,6	15,1	16,2	16,0	15,8	13,6	17,9
Yemen	39,5	33,9	39,6	48,2	44,6	41,0	28,2	35,8	38,7	34,5	38,8	47,5	42,8	39,1	24,0	28,0

TABLE 7: Women Economic Activity Rate (age group +15, per cent)

	1980								2005							
	15+	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**	**15+**	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**
Algeria	19,0	19,2	19,8	21,5	20,6	19,8	17,8	9,2	35,7	29,3	38,0	48,6	44,9	41,9	21,9	6,2
Bahrain	17,0	18,4	17,7	26,4	18,8	11,1	2,3	0,5	29,2	22,0	30,7	45,2	36,4	31,0	3,4	0,6
Comoros	64,6	59,0	66,1	68,8	71,4	73,6	63,1	37,6	57,7	50,5	59,5	68,2	65,9	63,8	57,1	24,8
Djibouti	57,5	48,3	58,9	64,9	66,5	68,0	54,4	27,8	53,0	43,8	54,8	63,5	62,8	62,2	48,2	21,4
Egypt	17,2	8,4	17,4	15,8	23,5	29,7	14,8	14,7	20,1	17,8	21,6	31,0	25,9	22,2	9,0	2,6
Iraq	15,0	14,8	15,9	23,1	17,9	13,7	7,9	2,2	20,0	18,5	21,0	30,2	24,1	18,6	8,6	1,8
Jordan	16,0	17,9	16,9	22,0	17,2	13,9	9,5	2,6	27,5	23,5	28,9	38,7	33,9	29,3	13,2	4,0
Kuwait	18,7	13,1	19,3	28,9	23,8	18,1	5,4	0,9	49,0	29,9	50,4	71,8	60,7	50,1	13,6	0,6
Lebanon	28,7	19,8	31,0	45,2	40,5	36,9	17,7	5,4	32,4	18,8	35,7	53,2	46,7	42,6	14,3	4,4
Libyan Arab Jamahiriya	18,0	17,7	18,7	21,7	20,3	19,0	11,1	4,7	32,1	19,9	33,9	50,1	44,9	40,1	13,7	4,2
Mauritania	55,9	49,2	57,7	63,7	64,2	64,5	50,1	24,5	54,3	46,7	56,5	63,6	63,6	63,5	49,1	23,0
Morocco	21,2	23,3	22,4	24,3	23,1	22,1	13,5	5,0	26,8	22,2	28,7	35,2	33,7	32,6	15,9	4,7
Oman	16,1	12,8	16,7	23,9	20,3	17,1	9,2	4,1	22,7	15,8	23,6	35,4	30,9	26,1	8,9	3,6
Qatar	19,4	5,6	19,8	29,1	29,0	28,8	7,5	2,4	36,2	5,6	36,9	46,3	49,2	51,7	12,1	3,6
Saudi Arabia	8,7	4,3	9,2	17,1	13,3	10,0	2,3	0,9	17,6	7,7	18,5	31,2	26,2	21,6	3,5	1,0
Somalia	62,2	71,0	64,3	61,1	62,5	63,7	46,2	28,7	59,1	66,0	61,0	60,6	60,2	59,9	42,7	23,9
Sudan	31,5	30,3	31,8	30,6	32,5	34,0	33,3	25,8	23,7	18,8	24,2	28,4	27,5	26,8	23,9	16,3
Syrian Arab Republic	23,8	24,3	24,7	26,1	25,9	25,8	18,3	9,3	38,5	39,5	39,9	43,7	41,9	40,2	24,6	15,5
Tunisia	18,8	24,4	19,8	21,6	17,8	15,0	11,1	4,1	28,6	31,1	31,1	41,9	33,8	28,1	10,8	3,0
United Arab Emirates	15,9	10,4	16,3	23,0	20,4	16,5	4,4	2,8	38,2	24,1	39,0	52,7	47,5	41,4	9,5	1,3
West Bank and Gaza Strip	9,4	5,1	9,9	12,9	13,6	14,1	8,3	3,0	10,3	5,8	10,9	15,0	14,8	14,6	7,4	2,3
Yemen	27,8	21,0	28,9	38,4	36,2	34,0	21,6	7,1	29,7	21,3	30,8	42,2	39,3	36,9	21,4	6,8

TABLE 8: Gender Gap in Economic Activity (per cent)

	1980								2005							
	15+	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**	**15+**	**15-24**	**15-64**	**25-34**	**25-54**	**35-54**	**55-64**	**65+**
Algeria	56,8	39,4	59,7	74,3	75,0	75,7	58,5	17,5	44,5	36,7	45,5	46,5	50,3	53,4	49,0	20,8
Bahrain	69,0	46,1	69,4	72,3	79,6	86,8	76,7	46,2	58,3	32,9	58,6	53,8	62,3	67,5	76,2	37,6
Comoros	22,4	12,3	21,2	28,5	26,3	24,5	32,1	43,7	29,4	19,2	27,8	30,5	32,5	34,4	38,0	58,9
Djibouti	24,4	17,5	23,8	27,8	27,1	26,4	32,0	31,2	29,9	21,6	29,1	32,2	32,8	33,3	38,3	40,5
Egypt	56,3	43,1	57,4	61,5	64,0	65,4	76,1	38,0	53,1	23,2	55,3	66,2	72,5	77,1	68,4	16,9
Iraq	60,5	43,5	61,2	72,8	74,6	76,0	60,4	43,8	57,8	40,6	58,2	66,0	68,9	71,6	58,7	44,9
Jordan	53,3	29,0	54,7	72,4	75,6	77,7	54,5	29,1	49,7	31,7	50,8	58,4	61,0	63,4	48,2	23,9
Kuwait	61,4	31,6	62,1	70,0	73,6	77,9	58,5	13,2	36,0	15,1	36,0	27,3	36,3	45,2	54,0	15,8
Lebanon	48,2	38,1	49,8	47,1	54,6	60,4	70,9	28,4	47,2	39,6	48,2	43,4	50,2	54,5	67,1	36,5
Libyan Arab Jamahiriya	63,5	40,1	64,5	74,0	76,3	78,3	73,2	34,2	48,3	39,6	48,9	47,0	52,1	56,8	65,9	38,2
Mauritania	29,3	20,9	28,6	32,3	32,1	32,1	38,6	41,2	29,6	21,3	28,6	32,0	32,2	32,5	38,3	40,5
Morocco	58,8	44,8	61,2	68,5	71,5	74,1	72,2	31,3	54,3	41,1	55,1	58,7	61,3	63,3	68,4	34,1
Oman	62,9	39,3	64,2	73,2	76,7	79,8	65,0	21,8	58,2	36,3	59,1	62,9	66,4	70,3	58,7	26,6
Qatar	70,8	61,1	70,8	70,4	70,3	70,3	79,4	58,9	52,8	47,0	52,7	49,6	47,6	45,8	76,1	48,1
Saudi Arabia	67,7	45,1	68,8	81,1	82,8	83,9	60,6	37,0	60,7	39,0	61,9	65,7	69,7	73,5	66,3	31,6
Somalia	33,2	19,2	31,5	38,2	37,0	36,0	50,6	59,3	35,7	21,8	34,1	38,8	39,3	39,7	53,5	63,4
Sudan	55,4	41,2	55,4	64,5	64,0	63,6	60,9	54,8	48,2	27,5	48,3	57,4	59,9	62,1	59,1	46,4
Syrian Arab Republic	55,8	38,6	57,1	70,2	70,5	70,6	65,5	29,3	49,1	36,5	49,3	56,2	57,4	58,5	56,2	38,0
Tunisia	61,4	46,2	64,1	74,7	78,8	81,8	60,2	28,4	46,4	18,3	47,3	52,1	61,0	67,4	54,7	32,6
United Arab Emirates	78,6	71,4	78,6	76,2	78,6	82,1	80,5	61,4	53,2	39,0	53,0	46,2	51,6	57,8	83,1	30,9
West Bank and Gaza Strip	54,0	40,6	56,5	73,3	72,2	71,4	47,3	15,1	56,2	37,9	57,9	71,9	72,2	72,4	50,5	15,8
Yemen	45,8	38,1	46,7	42,9	52,5	63,2	71,8	18,7	45,7	37,5	46,7	42,1	51,7	60,4	71,2	20,2

TABLE 9: Unemployment Rate (per cent)

	Men	Women	Year	Source
Algeria	17.5	18.1	2004	Labor force survey
Bahrain	9.4	6.7	2001	Population census
Egypt	6.3	23.9	2002	Labor force survey
Jordan	12.3	21.1	2000	
Kuwait	1	1.7	2002	Administrative reports
Lebanon	8.6	7.2	1997	
Morocco	11.5	13	2003	Labor force survey
Oman	14.2	37	1996	
Qatar	2.3	12.6	2001	Labor force survey
Saudi Arabia	4.2	11.5	2002	Labor force survey
Syrian Arab Republic	8.3	24.1	2002	Labor force survey
Tunisia	13.2	17.1	2004	Labor force survey
United Arab Emirates	2.2	2.6	2000	
West Bank and Gaza Strip	28	20	2004	Labor force survey

TABLE 10: Urbanization Rate (per cent)

	1960	2005
Algeria	30,4	60
Bahrain	82,3	90,2
Comoros	10	36,3
Djibouti	46,6	84,6
Egypt	37,9	42,3
Iraq	42,9	66,8
Jordan	50,9	79,3
Kuwait	72,3	96,4
Lebanon	39,6	88
Libyan Arab Jamahiriya	22,7	86,9
Mauritania	5,8	64,3
Morocco	29,2	58,8
Occupied Palestinian Territory	44	71,9
Oman	3,5	78,6
Qatar	80	92,3
Saudi Arabia	30,2	88,5
Somalia	17,3	35,9
Sudan	10,3	40,8
Syrian Arab Republic	36,8	50,3
Tunisia	36	64,4
United Arab Emirates	72,1	85,5
Yemen	9,1	26,3
Arab Countries	***30,2***	***57,1***

TABLE 11: Urban/rural migration by type of movement, Egypt, 1976–1996

	Census Year		
	1976	**1986**	**1996**
Urban–Urban	2 577 959	3 003 054	2 535 864
	64,3%	72,9%	60,4%
Rural–Urban	984 469	540 933	562 471
	24,6%	13,1%	13,4%
Urban–Rural	260 295	422 955	949 489
	6,5%	10,3%	22,6%
Rural–Rural	186 724	152 296	147 611
	4,7%	3,7%	3,5%
Total	4 009 447	4 119 238	4 195 435

Source: Calculated for the 1976, 1986, and 1996 census data (CAPMAS, 1979, 1989 and 1999)

TABLE 12: Estimated migrant stocks circa 2000 in the Arab region

Country	Thousands	Proportion of total population (%)
Qatar	409	70.4
United Arab Emirates	1,922	68.2
Kuwait	1,108	49.3
Jordan	1,945	38.6
Bahrain	254	37.6
Oman	682	26.1
Saudi Arabia	5,255	23.7
Lebanon	634	18.2
Libyan Arab Jamahiriya	570	10.9
Syrian Arab Republic	903	5.5
Yemen	284	1.4
Algeria	250	0.8
Tunisia	38	0.4
Egypt	169	0.2
Morocco	26	0.1

Source: United Nations 2004, , World Population Policies, 2003, New York: United Nations

TABLE 13: Percentage of nationals and expatriates in the population of GCC countries, 1995-2000

Country	1975	1980	1985	1995	2000	2001-2002
BAHRAIN						
Nationals	77.1	69.3	63.5	61.8	60.0	60.0
Expatriates	22.9	30.7	36.5	38.2	40.0	40.0
Total ('OOOs)	261.6	336.7	434.7	586.1	651.8	690.0
KUWAIT						
Nationals	30.9	28.5	27.7	36.1	37.4c	37.0
Expatriates	69.1	71.5	72.3	63.9	62.6	63.0
Total (`OOOs)	994.9	971.3	1,697.3	1,958.8	2,363.3	2,36
OMAN						
Nationals	86.9	81.8	81.6	72.7	73.3	74.0
Expatriates	13.1	18.2	18.4	27.3	22.7	26.0
Total ('OOOs)	766.0	984.0	1,193.0	2,149.0	2,441.8	2,42
QATAR						
Nationals	43.1	40.9	47.7	29.6	26.3	28.0
Expatriates	56.9	59.1	52.3	70.4	73.7	72.0
Total ('OOOs)	147.7	206.6	241.0	547.0	580.3	585
SAUDI ARABIA						
Nationals	86.7	75.4	69.3	67.9	74.6	70.0
Expatriates	13.3	24.6	30.7	32.1	25.4	30.0
Total ('000s)	7,026.3	9,688.0	12,642.2	19,534.0	20,278.8	23
UAE						
Nationals	37.0	28.7	36.2	25.1	24.3	20.0
Expatriates	63.0	71.3	63.8	74.9	75.7	80.0
Total ('OOOs)	525.1	977.4	1,116.8	2,378.0	2,889.6	23
All GCC countries						
Nationals	77.4	67.1	63.5	61.4	65.1	61.5
Expatriates	22.6	32.9	36.5	38.6	34.9	38.5
Total ('OOOs)	**9,721.6**	**13,550.7**	**17,325.0**	**27,152.9**	**29,321.7**	**1 32.5 I**

Sources: Girgis, 2002; ESCWA, 2001 (Data for 2000); PACI, 2002

d) Sources: for Bahrain, Oman, Qatar, Saudi Arabia and the UAE: The 2001 annual report by the GCC secretariat, released July 27, 2002 as well as The Economist Country Reports from mid-2002; for Saudi Arabia reports by different Saudi ministries were used as well; for Kuwait: Ministry of Planning data.

TABLE 14: Unemployment by level of education (per cent)

Country	Year	Sex	Primary	Secondary	Tertiary	Type of source
Algeria	1991	MF	54,6	25,6	5,8	Household or labor force survey
	1995	MF	55,6	20,7	15,7	
Bahrain	1997	MF	42,5	43,2	13,1	Employment official records
	1997	M	52,1	36,9	10,0	
	1997	F	23,3	55,9	19,6	
	2004	MF	32,5	41,1	19,9	
	2004	M	45,0	38,1	9,8	
	2004	F	20,6	44,0	29,5	
Djibouti	1991	MF	8,4	25,0	0,3	Household or labor force survey
	1991	M	11,3	23,7	0,3	
	1991	F	3,2	27,1	0,5	
Kuwait	1995	MF	49,1	29,4	6,3	Population census
	1995	M	53,3	26,3	3,9	
	1995	F	29,7	44,9	17,7	
	2002	MF	27,5	39,9	6,1	Administrative reports
	2002	M	36,6	28,8	2,9	
	2002	F	12,2	58,8	11,4	
Morocco	1990	MF	53,6	21,1	9,6	Household or labor force survey
	1990	M	58,2	19,1	9,2	
	1990	F	44,4	25,2	10,5	
	2003	MF	50,9	20,6	19,3	
	2003	M	57,6	19,4	14,3	
	2003	F	34,5	23,4	31,4	
Oman	1996	MF	43,7	35,3	4,4	Household or labor force survey
	1996	M	53,1	21,6	4,0	
	1996	F	19,8	70,0	5,4	
Qatar	1997	MF	24,3	28,8	21,5	Population census
	1997	M	28,1	26,1	13,0	
	1997	F	16,0	34,6	39,8	
Saudi Arabia	1999	MF	43,9	31,5	15,8	Household or labor force survey
	1999	M	55,7	27,1	6,9	
	1999	F	13,2	42,9	39,1	
	2002	MF	38,3	34,7	20,1	
	2002	M	52,1	31,6	6,5	
	2002	F	8,2	41,6	49,6	
Syrian Arab Republic	2002	MF	75,2	10,3	9,8	Household or labor force survey
Tunisia	1989	MF	51,2	25,8	1,3	Population census
	1989	M	53,4	26,0	1,3	
	1989	F	45,7	25,4	1,5	
	1994	MF	47,7	26,1	1,7	
	1994	M	50,5	26,0	1,4	
	1994	F	39,8	26,6	2,4	
	2003	MF	43,4	37,4	10,0	Household or labor force survey
United Arab Emirates	1995	MF	40,0	23,0	20,3	Population census
	1995	M	45,0	20,8	15,2	Household or labor force survey
	1995	F	12,6	35,5	49,0	
	1996	MF	28,4	14,6	14,9	
	1996	M	30,2	14,1	10,0	
	1996	F	14,3	18,1	53,0	
	2003	MF	57,5	14,5	17,6	
	2003	M	63,0	15,0	10,7	Household or labor force survey
	2003	F	15,0	10,4	71,5	

Source: KILM 4th Edition, ILO, 200

Table 15: Technical/vocational enrolment in ISCED 3 as % of total enrolment in ISCED 3

Country\Year	2003	2004	2005
Algeria	16.1	19.8	21.3
Bahrain	49.0	48.5	48.2
Djibouti	20.4	19.3	18.7
Egypt	63.9	63.3	57.1
Jordan	19.6	20.5	17.5
Kuwait	10.6	11.6	9.0
Lebanon	26.7	27.0	26.3
Libyan Arab Jamahiriya	49.0		
Morocco	12.7	11.7	12.0
Palestinian Autonomous Territories	4.6	4.5	4.8
Qatar	2.4	2.0	2.0
Saudi Arabia	3.5	3.5	3.5
Sudan	5.3	4.4	2.9
Syrian Arab Republic	31.4	31.5	28.2
Tunisia	3.0	5.7	6.4
United Arab Emirates	1.7	1.6	1.3
Yemen	1.7	1.6	1.7
Comoros	0.5	1.2	1.2
Australia	64.2	62.5	61.8
Japan	24.7	24.6	24.7
Belgium	70.2	55.7	55.5
Denmark	53.3	55.0	54.4
Finland	58.8	52.4	53.2
France	56.4	56.2	56.1
Germany	62.2	61.2	60.3
Greece	36.0	34.0	36.1
Iceland	34.0	38.7	38.7
Italy	26.0	62.8	61.5
Netherlands	69.1	69.2	68.5
Norway	59.2	60.5	60.8
Portugal	28.1	30.2	32.9
Spain	37.2	38.7	42.6
Sweden	49.0	57.5	57.7
Switzerland	65.0	64.8	64.7
United Kingdom	33.2	38.4	39.2

Source: UNESCO, http://stats.uis.unesco.org/, consulted 12 June 2007

TABLE 16: Youth unemployment (per cent)

Country	Year	Sex	Youth unemployment rate (%)	Ratio of youth unemployment rate to adult unemployment rate	Share of youth unemployed to total unemployed (%)	Share of youth unemployed in youth population (%)	Type of source
Algeria	2004	MF	43,4	3,1	45,6		Household or labor force survey
	2004	M	42,8	3,2	46,3		Household or labor force survey
	2004	F	46,3	3,0	42,4		Household or labor force survey
Egypt	2002	MF	27,1	4,8	57,0	8,1	Household or labor force survey
	2002	M	21,4	7,6	64,2	8,3	Household or labor force survey
	2002	F	40,0	2,4	50,3	7,8	Household or labor force survey
Jordan	2003	MF	30,3	3,7	58,6	8,4	Household or labor force survey
	2003	M	28,0	3,6	57,9	12,5	Household or labor force survey
	2003	F	43,2	3,7	59,2	3,8	Household or labor force survey
Morocco	2003	MF	17,0	1,7	35,9	7,3	Household or labor force survey
	2003	M	17,4	1,8	37,6	10,8	Household or labor force survey
	2003	F	15,9	1,3	31,7	3,8	Household or labor force survey
Qatar	1997	MF	14,6	12,0	52,6	4,9	Population census
	1997	M	10,6	10,8	52,2	5,5	Population census
	1997	F	74,7	27,9	53,6	4,0	Population census
Saudi Arabia	2002	MF			58,7		Household or labor force survey
	2002	M			60,5		Household or labor force survey
	2002	F			54,7		Household or labor force survey
Syrian Arab Republic	2002	MF	26,3	6,7	78,2	13,7	Household or labor force survey
	2002	M	21,4	9,7	82,1	15,6	Household or labor force survey
	2002	F	38,9	3,3	73,3	11,7	Household or labor force survey
United Arab Emirates	2000	MF			47,0		Official estimates
	2000	M			45,8		Official estimates
	2000	F			53,5		Official estimates
West Bank and Gaza Strip	2004	MF	39,8	1,7	33,7	10,2	Household or labor force survey
	2004	M	38,9	1,6	32,2	16,6	Household or labor force survey
	2004	F	44,8	3,2	44,1	3,4	Household or labor force survey
Yemen	1999	MF			48,4		Household or labor force survey
	1999	M			46,9		Household or labor force survey
	1999	F			55,8		Household or labor force survey

Source: KILM 4th Edition, ILO, 2005

TABLE 17: GDP per person employed (1980=100)

	Algeria	Egypt	Iraq	Jordan	Morocco	Saudi Arabia	Sudan	Syrian Arab Republic	United Arab Emirates	Yemen
1980	100	100	100	100	100	100	100	100	100	100
1981	98,5	101,4	79,7	100,2	94,8	101,4	98,8	106,1	100,3	102,0
1982	100,8	109,4	77,0	102,8	101,4	96,7	107,8	104,6	87,3	99,9
1983	101,8	114,9	68,4	100,3	98,3	81,1	106,6	102,6	78,7	102,0
1984	103,2	118,8	66,8	104,3	99,9	76,1	98,1	95,1	77,8	102,3
1985	104,3	123,5	64,0	103,6	103,5	66,9	89,1	97,5	70,1	98,2
1986	99,6	123,7	61,6	108,3	108,9	59,3	90,3	90,6	53,9	97,1
1987	95,4	123,8	61,6	106,7	103,9	58,6	90,2	89,9	52,9	97,7
1988	90,2	126,0	47,3	101,4	111,8	57,2	89,3	98,7	50,1	98,4
1989	90,2	126,8	42,0	87,1	111,7	56,2	94,3	87,0	52,6	98,1
1990	85,9	127,0	40,4	83,4	113,3	60,9	85,0	90,8	55,8	94,3
1991	81,1	125,9	14,4	73,1	118,0	65,4	91,2	97,6	54,1	85,4
1992	78,8	117,1	17,9	77,7	110,4	66,2	85,3	104,9	52,9	86,8
1993	73,9	117,2	17,3	75,0	106,6	65,1	88,2	102,6	51,2	89,6
1994	70,3	118,9	15,8	73,2	114,9	64,8	87,3	105,3	52,3	89,5
1995	70,2	121,0	13,9	72,8	104,9	64,5	87,1	108,0	51,4	97,5
1996	70,0	123,3	15,2	71,1	114,9	63,3	89,9	113,6	52,8	102,2
1997	68,1	126,8	14,1	70,3	109,7	62,9	95,5	114,5	53,7	106,2
1998	69,0	132,4	15,8	69,4	115,4	62,6	98,3	117,4	50,9	109,1
1999	68,7	136,5	16,7	68,5	112,7	60,2	102,0	108,9	49,6	110,3
2000	67,8	139,8	18,1	68,3	111,2	61,1	106,6	105,3	52,0	112,4
2001	67,0	140,2	19,1	68,9	115,3	59,3	110,1	105,1	50,1	114,0
2002	67,2	140,2	19,9	69,6	116,2	57,3	113,6	105,4	47,4	114,9
2003	69,1	140,2	15,1	69,4	119,4	59,2	117,0	104,2	47,2	114,9

Source: KILM 4th Edition, ILO, 2005

TABLE 17': GDP per person employed (1980=100)

	Canada	France	Indonesia	Israel	Italy	Japan	Republic of Korea	Malaysia	Turkey	United Kingdom	United States
1980	100	100	100	100	100	100	100	100	100	100	100
1981	100,2	101,5	93,2	102,5	100,6	102,3	103,6	102,3	103,4	101,4	101,4
1982	100,2	103,8	91,8	101,9	100,8	104,4	108,7	104,5	107,5	105,0	100,3
1983	102,3	105,1	95,5	103,0	101,7	105,1	120,2	107,2	110,3	109,5	103,2
1984	105,5	107,5	98,2	102,1	104,3	108,5	131,3	112,7	114,9	109,9	106,3
1985	108,1	109,4	96,8	103,2	106,3	112,5	134,8	110,3	118,7	112,4	108,2
1986	107,7	111,4	93,7	105,9	108,5	114,9	145,2	110,1	124,7	116,6	109,5
1987	108,9	113,8	95,4	111,2	111,6	118,5	153,6	110,6	132,5	119,7	110,4
1988	110,9	117,7	97,9	111,0	114,7	123,7	165,6	116,6	135,6	121,6	112,6
1989	111,1	120,7	105,4	109,5	117,2	127,2	169,3	123,3	133,7	121,1	114,1
1990	110,6	122,5	111,1	112,6	117,9	131,1	180,0	129,1	143,5	121,0	114,7
1991	110,0	123,5	120,1	112,6	117,3	132,9	190,7	137,2	139,2	122,6	115,4
1992	112,0	126,0	125,4	115,3	118,8	132,8	197,2	145,0	146,2	125,8	118,3
1993	114,1	126,6	133,3	115,5	120,8	132,9	205,6	152,9	166,2	129,9	119,5
1994	117,1	129,0	138,4	121,1	125,3	134,3	215,7	162,5	145,3	132,9	121,4
1995	118,3	129,9	153,4	124,5	129,1	136,8	228,4	177,5	151,3	136,7	122,5
1996	119,1	130,8	154,6	126,5	129,7	140,8	239,3	177,7	157,3	139,2	125,2
1997	121,4	132,5	162,4	126,7	131,8	141,9	246,1	186,9	169,1	141,2	127,8
1998	123,3	134,4	137,4	127,3	132,8	141,2	243,9	172,5	169,7	144,0	131,0
1999	126,9	136,0	136,7	126,2	133,5	142,4	262,4	178,2	159,7	146,2	134,6
2000	130,3	137,3	141,8	131,6	135,0	146,8	273,1	184,4	175,2	150,0	137,5
2001	130,9	137,7	145,2	126,6	134,7	148,3	278,1	183,3	162,5	152,2	138,4
2002	132,2	138,6	149,1	122,5	132,8	149,7	289,4	187,1	176,8	153,7	141,4
2003	131,8	139,5	156,7	121,0	131,7	151,9	298,8	190,3	188,8	155,6	145,0

Source: KILM 4th Edition, ILO, 2005

Table 18. The Coefficient on Years of Schooling. Mincerian Rate of Return, Latest Year

Country	Year	Mean years of schooling	Coefficient (percent)	Source
Argentina	1989	9.1	10.3	Psacharopoulos (1994)
Australia	1989	..	8.0	Cohn and Addison (1998)
Austria	1993	..	7.2	Fersterer and Winter-Ebmer (1999)
Bolivia	1993	..	10.7	Patrinos (1995)
Botswana	1979	3.3	19.1	Psacharopoulos (1994)
Brazil	1989	5.3	14.7	Psacharopoulos (1994)
Burkina Faso	1980	..	9.6	Psacharopoulos (1994)
Canada	1989	..	8.9	Cohn (1997)
Chile	1989	8.5	12.0	Psacharopoulos (1994)
China	1993	..	12.2	Hossain (1997)
Colombia	1989	8.2	14.0	Psacharopoulos (1994)
Costa Rica	1991	..	8.5	Funkhouser (1996)
Cote d'Ivoire	1986	6.9	20.1	Psacharopoulos (1994)
Cyprus	1994	..	5.2	Menon (1995)
Denmark	1990	..	4.5	Christensen and Westergard-Nielsen (1999)
Dominican Rep.	1989	8.8	9.4	Psacharopoulos (1994)
Ecuador	1987	9.6	11.8	Psacharopoulos (1994)
Egypt	1997	..	5.2	Lambropoulos and Karadjia (1999)
El Salvador	1992	..	7.6	Funkhouser (1996)
Estonia	1994	10.9	5.4	Kroncke (1999)
Ethiopia	1972	6.0	8.0	Psacharopoulos (1994)
Finland	1993	..	8.2	Asplund (1999)
France	1977	6.2	10.0	Psacharopoulos (1994)
Germany	1988	..	7.7	Cohn and Addison (1998)
Ghana	1995	9.7	7.1	Jones (2001)
Greece	1993	..	7.6	Magoula and Psacharopoulos (1999)
Guatemala	1989	4.3	14.9	Psacharopoulos (1994)
Honduras	1991	..	9.3	Funkhouser (1996)
Hong Kong	1981	9.1	6.1	Psacharopoulos (1994)
Hungary	1987	11.3	4.3	Psacharopoulos (1994)
India	1995	..	10.6	Kingdon (1998)
Indonesia	1995	8.0	7.0	Duflo (2000)
Iran	1975	..	11.6	Psacharopoulos (1994)
Israel	1979	11.2	6.4	Psacharopoulos (1994)
Italy	1987	..	2.7	Brunello, Comi and Lucifora (1999)
Jamaica	1989	7.2	28.3	Psacharopoulos (1994)

Country	Year	Mean years of schooling	Coefficient (percent)	Source
Japan	1988	..	13.8	Cohn and Addison (1998)
Kenya	1986	8.0	16.2	Dabalen (1998)
Korea	1986	8.0	13.0	Ryoo, Nam and Carnoy (1993)
Kuwait	1983	8.9	4.5	Psacharopoulos (1994)
Malaysia	1979	15.8	9.4	Psacharopoulos (1994)
Mexico	1992	..	7.6	Psacharopoulos *et al*. (1996)
Morocco	1970	2.9	15.8	Psacharopoulos (1994)
Nepal	1999	3.9	9.7	Parajuli (1999)
Netherlands	1994	..	6.4	Hartog, Odink and Smits (1999)
Nicaragua	1996	..	12.1	Belli and Ayadi (1998)
Norway	1995	..	5.5	Barth and Roed (1999)
Pakistan	1991	..	15.4	Katsis, Mattson and Psacharopoulos (1998)
Panama	1990	9.2	13.7	Psacharopoulos (1994)
Paraguay	1990	9.1	11.7	Psacharopoulos (1994)
Peru	1990	10.1	8.5	Psacharopoulos (1994)
Philippines	1998	8.8	12.6	Schady (2000)
Poland	1995-96	..	7.0	Nesterova and Sabirianova (1998)
Portugal	1991	..	8.6	Cohn and Addison (1998)
Puerto Rico	1989	..	15.1	Griffin and Cox Edwards (1993)
Russian Federation	1996	11.7	7.2	Nesterova and Sabirianova (1998)
Singapore	1998	9.5	13.1	Sakellariou (2001)
South Africa	1994	7.1	4.1	Dabalen (1998)
Spain	1991	..	7.2	Mora (1999)
Sri Lanka	1981	4.5	7.0	Psacharopoulos (1994)
Sudan	1989	10.2	9.3	Cohen and House (1994)
Sweden	1991	..	5.0	Cohn and Addison (1998)
Switzerland	1991	..	7.5	Weber and Wolter (1999)
Taiwan	1972	9.0	6.0	Psacharopoulos (1994)
Tanzania	1980	..	11.9	Psacharopoulos (1994)
Thailand	1989	..	11.5	Patrinos (1995)
Tunisia	1980	4.8	8.0	Psacharopoulos (1994)
United Kingdom	1987	11.8	6.8	Psacharopoulos (1994)
United States	1991-95	..	10.0	Rouse (1999)
Uruguay	1989	9.0	9.7	Psacharopoulos (1994)
Venezuela	1992	..	9.4	Psacharopoulos and Mattson (1998)
Vietnam	1992	7.9	4.8	Moock, Patrinos and Venkataraman (1998)

Country	Year	Mean years of schooling	Coefficient (percent)	Source
Yugoslavia	1986	..	4.8	Bevc (1993)

TABLE 19: Agricultural labor among workers (%)

	1995	2000	2001	2002	2003	2004	2005
Algeria	25,4	24,4	24,1	23,8	23,6	23,3	23,0
Bahrain	1,5	0,9	0,9	0,9	0,9	0,9	0,8
Djibouti	80,4	78,5	78,1	77,9	77,4	77,0	76,5
Egypt	37,0	33,6	32,9	32,2	31,5	30,8	30,2
Iraq	12,8	10,1	9,6	9,2	8,7	8,3	7,9
Jordan	13,0	11,4	11,1	10,7	10,4	10,1	9,8
Kuwait	1,8	1,6	1,6	1,6	1,6	1,8	1,9
Lebanon	5,2	3,7	3,5	3,2	3,1	2,9	2,7
Libya	8,1	6,0	5,6	5,3	4,9	4,6	4,3
Mauritania	54,1	52,9	52,7	52,4	52,1	51,9	51,7
Morocco	40,2	36,1	35,3	34,6	33,8	33,1	32,4
Oman	41,2	36,9	36,1	35,2	34,3	33,5	32,6
Qatar	1,7	1,2	1,2	1,2	1,2	1,2	1,2
Saudi Arabia	13,9	6,1	6,0	4,7	7,9	9,5	11,2
Sudan	65,4	61,1	60,2	59,3	58,3	57,4	56,6
Syria	30,5	28,0	27,5	27,1	26,6	26,2	25,7
Tunisia	26,5	24,6	24,2	23,9	23,5	23,1	22,8
United Arab Emirates	6,2	4,9	4,7	4,4	4,2	4,0	3,8
Yemen	55,3	50,4	49,4	48,4	47,4	46,4	45,4
Arab Countries	**33,6**	**31,6**	**31,0**	**30,4**	**29,5**	**29,0**	**28,6**

Source: Unified Arab Economic Report, 2006

TABLE 20: Agriculture, value added (% of GDP)

	1995	2000	2001	2002	2003	2004	2005
Algeria	10,5	8,9	10,4	10,0	10,5	10,2	8,5
Comoros	40,9	48,6	50,0	50,2	50,5	50,9	51,0
Djibouti	3,2	3,5	3,5	3,6	3,6	3,6	3,7
Egypt	16,8	16,7	16,6	16,5	16,7	15,2	14,9
Iraq	..	5,4	8,1	9,0	8,6	..	..
Jordan	4,3	2,3	2,3	2,5	2,8	2,8	2,8
Kuwait	0,4	0,4	0,4	0,5	0,5	..	..
Lebanon	7,3	7,3	6,8	6,8	6,6	6,5	6,5
Mauritania	37,4	27,6	27,0	25,8	27,5	25,6	23,7
Morocco	14,6	13,8	15,6	16,1	16,7	15,9	14,1
Oman	2,8	2,0	2,1	2,1	2,0	1,9	..
Saudi Arabia	5,9	4,9	5,2	5,1	4,5	4,0	..
Sudan	32,4	41,8	42,9	41,6	39,3	35,4	33,7
Syria	31,6	23,8	27,0	26,8	26,7	24,8	23,3
Tunisia	11,4	12,3	11,6	10,3	12,1	12,7	11,6
United Arab Emirates	2,9	3,5	3,5	3,4	2,9	2,6	2,3
Yemen	20,0	10,3	11,5	11,1	14,3	13,8	13,3

Source: WDI, 2006

TABLE 21: Alternative Scenarios for Labor Force Absorption

Scenario	Growth rate of					Investment/GDP			Implied Growth of GDP
	L	K			A				
		a=0.5	a=0.6	a=0.7		a=0.5	a=0.6	a=0.7	
1	3,50%	8,5%	7,7%	7,1%	-0,50%	40,5%	38,0%	36,2%	5,5%
2	3,50%	7,5%	6,8%	6,4%	0,00%	37,5%	35,5%	34,1%	5,5%
3	3,50%	6,5%	6,0%	5,6%	0,50%	34,5%	33,0%	31,9%	5,5%
4	3,50%	3,5%	3,5%	3,5%	2,00%	25,5%	25,5%	25,5%	5,5%
5	4,00%	9,0%	8,2%	7,6%	-0,50%	42,0%	39,5%	37,7%	6,0%
6	4,00%	8,0%	7,3%	6,9%	0,00%	39,0%	37,0%	35,6%	6,0%
7	4,00%	7,0%	6,5%	6,1%	0,50%	36,0%	34,5%	33,4%	6,0%
8	4,0%	4,0%	4,0%	2,00%	27,0%	27,0%	27,0%	4,0%	6,0%

TABLE 22: Expenditures on Active and Passive Labor Market Programs in Selected MENA Countries, 2003

	Active spending as % of GDP	**Passive spending as % of GDP**	**Total spending as % of GDP**
Algeria	1.6	0.2	1.8
Egypt	1.4	0.1	1.5
Morocco	1.3	---	1.3
Iran	1.5	0.1	1.6
Tunisia	1.5	---	1.5
Qatar	0.9	---	0.9
Jordan	1.2	---	1.2
Lebanon	1.0	---	1.0
Yemen	0.7	---	0.7
Unweighted average	**1.3**	**0.1**	**1.3**

Source: Razmara (2005), "Labor Markets Worldwide: Key Trends and Policy Issues", available on internet at **http://info.worldbank.org/etools/docs/library/206981/presentation%20employment%20programs%20setareh.pdf**

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