



# Youth Employment in the MENA Region: A Situational Assessment

Nader Kabbani  
Ekta Kothari

September 2005

**Youth Employment in the MENA Region:  
A Situational Assessment**

**Nader Kabbani**

**Ekta Kothari**

**September 2005**

## **Abstract**

This paper investigates the youth labor market in the MENA region in order to identify factors contributing to the persistently high rates of unemployment and joblessness among MENA youth. The paper undertakes three parallel lines of inquiry. First, we review characteristics and trends related to the youth labor market. Second, we review findings from the research literature in order to identify determinates of labor market outcomes for youth. Third, we use survey data from Egypt and Morocco to address additional questions about the youth employment situation. While we do not test for causality empirically in this paper, our analysis suggests several regional factors that may be contributing to the high rates of unemployment and joblessness among MENA youth: strong labor supply pressures, rising female labor force participation rates, and labor market rigidities that may be interacting with these two factors. Public sector wage premiums and bureaucratic obstacles to the development of private sector enterprises may be especially important contributing factors. Despite many common regional trends, MENA countries also face unique circumstances suggesting unique policy prescriptions. This is especially true in comparing GCC and non-GCC countries.

## **Youth Employment in the MENA Region: A Situational Assessment**

**Nader Kabbani and Ekta Kothari\***

### **1. INTRODUCTION**

The economies of the Middle East and North Africa (MENA) region are diverse in many ways but their fortunes have largely depended on the presence of oil in the region. The oil boom of the 1970s benefited oil-producing countries as well as non-oil-producing countries (through remittances of migrant laborers, trade, capital flows, and bilateral aid). Between 1960 and 1980, MENA was second only to East Asia in terms of per capita income growth, averaging close to 3.5 percent per year. By the early 1980s, the oil boom had ended and per capita income *fell* by an average of nearly 2 percent per year. The economic situation rebounded slightly during the 1990s as income per capita increased by around 1.5 percent per year (World Development Indicators, 2003; Makdisi et al., 2001).

The sluggish recovery of the 1990s was accompanied by weak labor markets and persistently high unemployment rates, especially for youth. The existing literature points to various regional trends as suggestive causes of the labor market situation, including demographic trends, the prominence of public sector employment, and obstacles to the development of private sector enterprises. This literature is exemplified by the *MENA Development Report: Unlocking the Employment Potential of the Middle East and North Africa* (World Bank, 2004). While the individual studies typically include a discussion about youth, little research has *focused* on youth employment. Among the 200 references cited in the *MENA Development Report* (World Bank, 2004), only one focused on youth employment in developing countries (O'Higgins, 2003) and none focused on youth employment in the MENA region. The youth employment situation may be quite different from that for adults, involving transitions from school to work and from single to married life. As a result, policy prescriptions for the youth labor market may be quite different than those for adults.

\*The views expressed in this paper do not necessarily reflect the views or policies of the World Bank. The authors, Nader Kabbani, American University of Beirut, [nader.kabbani@aub.edu.lb](mailto:nader.kabbani@aub.edu.lb) and Ekta Kothari, World Bank, [ekorthai@worldbank.org](mailto:ekorthai@worldbank.org) are grateful for valuable comments and suggestions from Jean Fares, Marco Manacorda, Gaele Pierre, Zafiris Tzannatos, and Myra Yazbeck.

This paper takes the current literature, especially the *MENA Development Report*, as a point of departure. It narrowly focuses on the labor market situation of youth in the MENA region and tries to ascertain reasons behind their high rates of unemployment and joblessness. While we typically take youth to mean 15-24 year-olds, our analysis of the youth labor market will occasionally cover older groups making the transition from school to work, including 25-29 year-olds and university graduates (in such cases, we will clearly identify the groups under study). In each of three areas: labor supply, labor demand, and labor market institutions, the paper undertakes three lines of inquiry. First, we review regional circumstances and trends associated with the youth employment situation. This descriptive exercise is informative in its own right because much of the literature presents only aggregate labor force data. Second, we review findings from the research literature in order to identify determinates of labor market outcomes for youth. Third, we use survey data from Egypt and Morocco to address additional questions about the youth employment situation.

Our study notes major *similarities* and major *differences* in youth employment trends across MENA countries. On the one hand, all MENA countries experienced demographic trends that contributed to high shares of youth in the working-age population during the 1990s and 2000s. Also, all MENA countries have low female labor force participation rates compared to other developing regions of the world. On the other hand, labor-importing Gulf Cooperation Council (GCC) countries and labor-exporting non-GCC countries face different labor market situations, necessitating different policy responses<sup>1</sup>. For non-GCC countries, the main issue is *creating* enough jobs to accommodate entering cohorts. For GCC countries, 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.

The main purpose of this paper is to place the youth employment situation in the MENA region and across MENA countries within a regional and historical context. In our presentation and analysis of the data, we identify a number of suggestive associations but we make little attempt to infer causality. Instead, we discuss our findings in light of the international and regional research literature. This allows us to identify which

---

<sup>1</sup> GCC countries include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates. Non-GCC countries include Algeria, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, the West Bank and Gaza, and Yemen.

observed associations hold promise for follow-up study. Among other findings, our analysis suggests that the interaction between various labor market rigidities (especially the size and role of the public sector) and various labor supply pressures (demographic trends, migration patterns, and increasing female labor force participation rates) merits further examination.

Section 2 of this paper describes the precarious state of youth employment in the MENA region. Sections 3, 4, and 5 present an analysis of, respectively, labor supply, labor demand, and institutional factors that might be contributing the youth employment situation. The sections cover both a descriptive review and a review of the relevant research literature. Section 6 concludes and discusses lingering questions and policy alternatives.

## **2. YOUTH EMPLOYMENT & UNEMPLOYMENT**

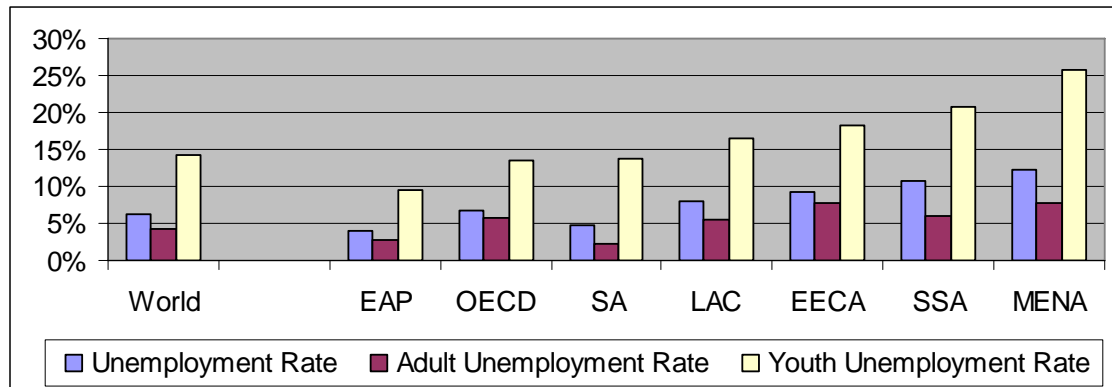
Unemployment rates in the MENA region are the highest in the world (Figure 2.1)<sup>2</sup>. An estimated 17 million workers, or around 12 percent of the MENA workforce, were unemployed in 2001 (LABORSTA, 2004)<sup>3</sup>. Unemployment rates for MENA youth (age 15-24) are also the highest in the world. An estimated 7.9 million young workers were unemployed in 2001 – over 25 percent of the young economically-active population in the MENA region. The adult unemployment rate in MENA, estimated at 7.8 percent in 2001, while also the highest in the world, was not significantly different than the 7.7 percent adult unemployment rate of the transition economies of Eastern Europe and Central Asia (EECA).

---

<sup>2</sup> This report relies on data from both the International Labor Organization (ILO) and the World Bank. ILO and World Bank regional definitions are similar, with some minor differences. For example, ILO counts Somalia and Sudan as part of MENA, whereas World Bank counts them as part of Sub-Saharan Africa. This report conforms to World Bank regional definitions whenever possible. However, unless otherwise stated, when ILO data are used, regions will refer to ILO-defined regions. In addition, we sometimes include other industrialized countries under the ‘OECD’ regional category in order to limit the number of regions identified.

<sup>3</sup> Unemployment estimates differ widely by source and methodology used. For example, the World Bank estimates the 2001 regional unemployment rate in MENA at close to 15 percent (Keller and Nabli, 2002). According to most sources, however, MENA had the highest unemployment rates in the world.

**Figure 2.1 Unemployment Rates by Region: Total, Adult, and Youth  
(2003 estimates)**



Source: Calculations based on Tarantino (2004) and LABORSTA (2004)

All regions of the world had higher unemployment rates for youth than for adults in 2001 (Figure 2.1). The developing regions of South Asia (SA), East Asia and the Pacific (EAP), Sub-Saharan Africa (SSA), MENA, and Latin American and the Caribbean (LAC), all had unemployment rates for youth that were at least three times higher than those for adults. Differences were smaller for Organization for Economic Co-Operation and Development (OECD) countries. At the country level, unemployment rates for youth are higher than for adults in most developing and industrialized countries (O'Higgins, 2003). The school-to-work transition involves much turnover and experimentation to find a right job fit (Ryan, 2001). O'Higgins (2003) suggests that many developing countries have barriers to employment that result in entry-level queues that fall more heavily on first-time job seekers. This situation can be exacerbated by the presence of a high-wage / high-benefit formal private or public sector and a low-wage / low-benefit informal sector, which is the case in many MENA countries. O'Higgins (2003) further hypothesizes that the high unemployment rates among youth in developing countries may be due to inadequate social safety nets, leading families to provide these services for young family members and contributing to higher wait and search times.

Unemployment rates vary considerably across MENA countries, from 1 percent in Qatar in 2004 to 32 percent in the West Bank and Gaza in 2002 (Table 2.1, Column 1). GCC countries had lower unemployment rates than all non-GCC countries with available data. However, unemployment rates among GCC *nationals* were higher than the

averages in Table 2.1 suggest, because few expatriate workers remain in a country unemployed. For example, in Bahrain, the unemployment rate in 2001 was 5.5 percent: 12.7 percent among nationals and 0.4 percent among expatriates (Table 2.2). In Saudi Arabia, the unemployment rate in 2002 was 5.3 percent: 9.7 percent among nationals and 0.8 percent among expatriates. Thus, unemployment rates among GCC nationals are comparable to rates in non-GCC countries.

**Table 2.1 Ranking MENA Countries by Unemployment Rates (most recent year)**

<b>Working-age (15-64) Unemployment Rate</b>		<b>Adult (25-64) Unemployment Rate</b>		<b>Youth (15-24) Unemployment Rate</b>		<b>Youth / Adult Unemployment Rate</b>	
Qatar (2004)	1%	Qatar	0.5%	UAE	6%	WB Gaza	1.5
UAE (1995)	2%	Kuwait	1%	Qatar	11%	Morocco	1.7
Kuwait (1995)	2%	UAE	1%	Kuwait	13%	Yemen	2.2
S. Arabia (2002)	5%	S. Arabia	2%	Morocco	17%	Algeria	2.9
Bahrain* (2001)	6%	Bahrain*	3%	Yemen	19%	Jordan	3.6
Lebanon* (1997)	8%	Lebanon*	n/a	Iran	19%	Iran	3.9
Iran (1996)	9%	Syria	4%	Bahrain	20%	Lebanon	n/a
Egypt (2001)	9%	Egypt	5%	Lebanon	22%	UAE	5.7
Yemen (1999)	12%	Iran	5%	Syria	26%	Egypt	5.9
Morocco* (2003)	12%	Jordan	8%	Egypt	28%	Syria	6.5
Syria (2002)	12%	Yemen	9%	S. Arabia	28%	Bahrain	6.8
Jordan (2004)	15%	Morocco*	10%	Jordan	30%	S. Arabia	12
Algeria* (2001)	27%	Algeria	18%	WB Gaza	43%	Kuwait	16
WB Gaza (2002)	32%	WB Gaza	28%	Algeria	53%	Qatar	22

Sources: LABORSTA (2004), Jordan DOS (2004), Planning Council of Qatar (2005)

\* Estimate includes age 65+.

**Table 2.2 Unemployment Rates among National & Expatriate Workers in the GCC**

	<b>Nationals</b>				<b>Expatriates</b>			
	<b>Total</b>	<b>Adult</b>	<b>Youth</b>	<b>Youth/Adult</b>	<b>Total</b>	<b>Adult</b>	<b>Youth</b>	<b>Youth/Adult</b>
Qatar	5%	2%	26%	15.8	1.0%	0.4%	9%	25.0
Bahrain	13%	7%	31%	4.2	0.5%	0.2%	2%	10.0
S. Arabia	10%	5%	37%	8.1	0.8%	0.5%	6%	12.5

Sources: Bahrain CIO (2002), Saudi CDS (2003), Planning Council of Qatar (2005)

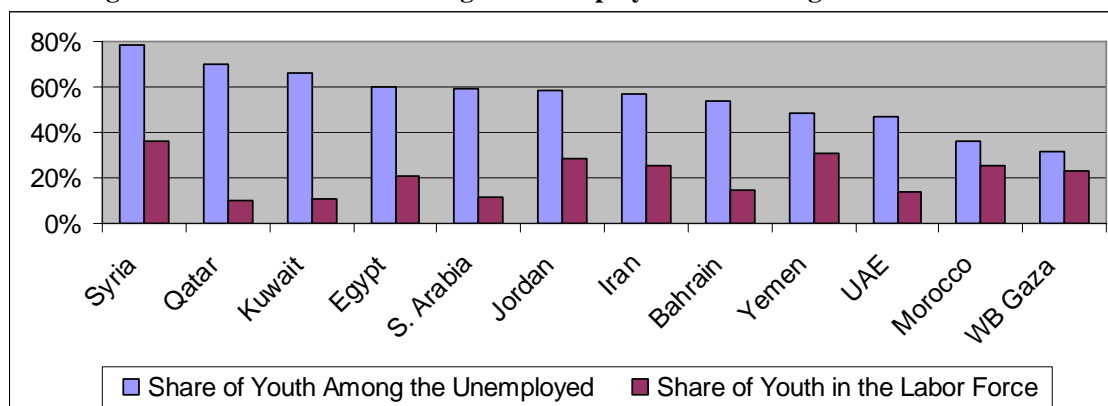
Unemployment rates among MENA youth were higher than among adults in all MENA countries with available survey data, often on the order to several magnitudes (Table 2.1, Columns 2, 3 and 4). Three GCC countries (UAE, Qatar, and Kuwait) had lower unemployment rates for youth than all non-GCC countries. However, Saudi Arabia and Bahrain had relatively high youth unemployment rates – 28 and 20 percent,



respectively<sup>4</sup>. Again, the presence of expatriate workers understates the true magnitude of the youth unemployment problem in the GCC. The unemployment rate was 37 percent among young Saudi *nationals* in 2002 and 38 percent among young Bahraini *nationals* in 2001 (Table 2.2). These rates were higher than all non-GCC countries, except West Bank & Gaza and Algeria.

In many MENA countries, high unemployment rates are primarily the result of young job seekers waiting and searching for work. The share of youth among the total unemployed population is over 50 percent in most MENA countries with available data, reaching as high as 70 percent in Qatar, and 78 percent in Syria (Figure 2.2). Youth unemployment rates are higher than the share of youth in the labor force in all MENA countries – in some cases, several times higher. For example, in Qatar, youth make up less than 10 percent of the total labor force, but more than 70 percent of the unemployed. The large differences in Qatar and other GCC countries reflect the presence of large populations of *adult* expatriate workers. Non-GCC countries exhibit more variation. For example, in Egypt, 15-24 year-olds represent only 21 percent of the labor force, but over 60 percent of the unemployed population; while in Morocco the proportions are 25 and 36 percent, respectively.

**Figure 2.2 Share of Youth among the Unemployment & among the Labor Force**



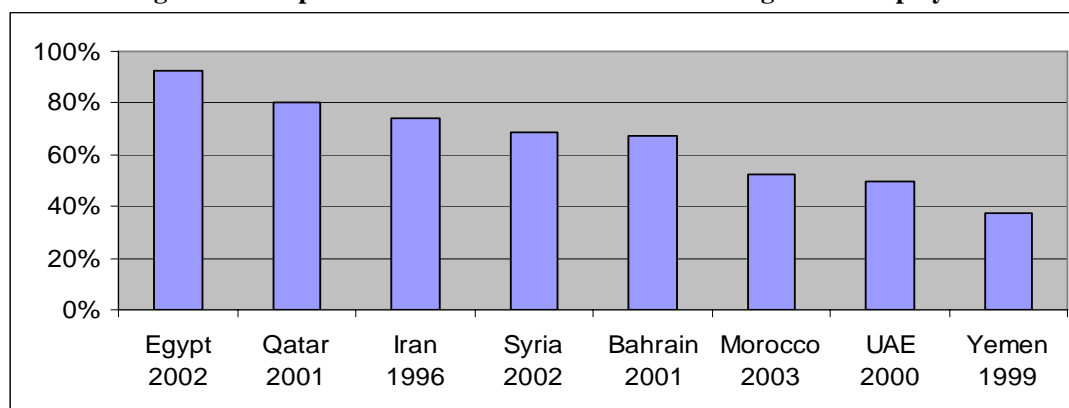
Sources: LABORSTA (2004), Jordan DOS (2004), Planning Council of Qatar (2005)

The data so far suggest that, in the MENA region, unemployment is largely a problem among youth. It is also a labor market insertion problem. In most MENA

<sup>4</sup> The unemployment rate of youth relative to adults (Table 2.1, Column 4) is especially high in GCC countries, partly because expatriate workers represent a smaller share of the youth labor force in these countries. In Saudi Arabia, 29 percent of young workers were expatriates, compared to 50 percent overall. In Bahrain, 38 percent of young workers were expatriates, compared to 59 percent overall.

countries, the majority of the unemployed are first-time job seekers (Figure 2.3). This is especially the case in Egypt, Qatar, Iran, Syria, and Bahrain, where first-time job seekers account for more than two thirds of the unemployed population. Unemployment is much less common among mid-career adults. For this reason, high unemployment rates in MENA do not immediately translate into a problem of poverty. In fact, by some accounts, MENA has the lowest regional poverty rate in the developing world (World Bank, 2003).

**Figure 2.3 Proportion of First-time Job Seekers among the Unemployed**



Source: LABORSTA (2004), Syria (CBS, 2003)

Unemployment in the MENA region also has an important gender dimension. Unemployment rates among females and female youth are the highest in the world, both in absolute terms and *compared to unemployment rates for males* (Table 2.3). In 2001, the unemployment rate among female youth in MENA was estimated at nearly 32 percent, 9 percentage points higher than among male youth (ILO, 2004). By comparison, worldwide unemployment rates for female youth were 0.3 percentage points *lower* than for males. We will return to this issue below.

**Table 2.3 Unemployment Rates, by Region (2001)**

	World	EAP	SA	SEA	LAC	SSA	MENA
Overall Unemployment	6.1	3.3	4.7	6.1	9.0	10.6	12.0
Female	6.3	2.7	6.0	6.7	11.3	9.3	16.3
Male	6.0	3.8	4.1	5.7	7.6	11.6	10.5
Difference	0.3	-1.1	1.9	1.0	3.7	-2.3	5.8
Youth Unemployment	13.9	7.1	13.2	14.4	16.6	25.4	20.6
Female	13.7	5.8	15.4	15.6	20.8	17.8	31.6
Male	14.0	8.2	12.3	13.6	13.9	22.7	22.6
Difference	-0.3	-2.4	3.1	2.0	6.9	-4.9	9.0

Source: ILO (2003)

In most regions of the world, the duration of unemployment spells is shorter for youth than for adults, reflecting the natural tendency of youth to more frequently move between jobs (O’Higgins, 2003). In some MENA countries, however, youth unemployment appears to be the result of *waiting* for the right job. Thus, unemployment spells may be longer, especially for educated youth, who may require more time to find a good job match for their skills. This is an important point, because it is the duration of unemployment, rather than its occurrence, that is most detrimental to human capital (Ryan, 2001). Because cross-country data on unemployment duration are not readily available, we study this issue, on a limited scale, using data from the 1998 Labor Market Survey for Egypt and the 1999 Labor Force Survey for Morocco, disaggregated by level of education (Table 2.4). In both countries, the average duration of unemployment spells for university or vocational education graduates is fairly high, at 2.5 years in Egypt and 3 years in Morocco, providing evidence of wait unemployment. In Egypt, the duration of unemployment spells is lower for university graduates than for those with no university education. By comparison, in Morocco, the duration of unemployment spells for university graduates is not significantly different from those with no university education. Furthermore, job seekers with a secondary education face longer unemployment spells than those with no secondary credentials. Boudarbat (2004) suggests that, for Morocco, the high rates of unemployment and long duration spells for educated youth are the result of workers waiting to enter the public sector, which pays entry-level wages that are 42.5 percent higher than the private sector.

**Table 2.4 Unemployment Spell Duration in Months, Egypt (1998) and Morocco (1999)**

Age Group	All*	Less than Secondary	Secondary	Vocational or University
<b>Egypt (1998)</b>				
<b>15-19</b>	15.3	35.1	--	--
<b>20-24</b>	28.2	33.0	34.0	13.0
<b>25-29</b>	59.8	50.3	78.7	37.5
<b>30 &amp; Over</b>	64.8	36.2	93.3	74.0
<b>Average</b>	36.2	34.9	38.9	30.3
<b>Morocco (1999)</b>				
<b>15-19</b>	18.62	18.69	--	--
<b>20-24</b>	26.84	27.33	26.50	18.39
<b>25-29</b>	40.66	42.34	31.10	39.00
<b>30 &amp; Over</b>	52.81	51.63	66.08	53.35
<b>Average</b>	34.73	35.00	41.23	36.91

Sources: 1998 Egypt Labor Market Survey and 1999 Moroccan Labor Market Survey.

\* Only calculated for persons age 15 and above with valid data on educational attainment.

Besides having the highest regional unemployment rates in the world, the MENA region also has the lowest labor force participation rates – estimated at less than 60 percent for adults and less than 40 percent for youth in 2003 (Table 2.5). The low labor force participation rates for adults can be attributed to low labor force participation rates among adult females – which were estimated at less than 30 percent, compared to 41 percent in next closest region (SA). The labor force participation rates for adult males, at 88 percent, are quite comparable to other developing regions of the world.

**Table 2.5 Adult & Youth Labor Force Participation Rates (2003)**

	Adults	Adult Males	Adult Females	Ratio	Youth	Youth Males	Youth Females	Ratio
<b>World</b>	70%	85%	56%	1.5	55%	63%	46%	1.4
<b>EAP</b>	80%	89%	71%	1.2	68%	70%	65%	1.1
<b>SSA</b>	79%	93%	66%	1.4	65%	73%	58%	1.3
<b>LAC</b>	68%	86%	51%	1.7	55%	66%	43%	1.5
<b>SA</b>	66%	90%	41%	2.2	44%	60%	28%	2.2
<b>MENA</b>	59%	88%	29%	3.1	39%	53%	24%	2.2

*Source: Calculations based on Tarantino (2004) & LABORSTA (2004)*

For youth, the issue is more complicated. Young males in the MENA region do have the lowest labor force participation rates in the world, 53 percent compared to 60 percent in the next closest region (SA). Young females in the MENA region also have the lowest labor force participation rates in the world, around 24 percent in 2003 compared to 28 percent in the next closest region (SA). However, this four percentage point difference between young females in MENA and South Asia is much smaller than the 11 percentage point difference between adult females in MENA and SA. In addition, while the ratio of male to female labor force participation rates among youth is large (2.2 times higher for males) it is smaller than the gender difference among adults (3.1 times higher for males) and is comparable to gender differences for youth in SA. These figures suggest that female labor force participation rates in MENA are improving relative to males and to other regions of the world. However, to draw firmer conclusions, we need to consider changes over time.

Table 2.7 presents participation rates for six MENA countries with available census data over three decades (Algeria, Bahrain, Egypt, Iran, Kuwait, and Tunisia). Labor force participation among prime-working-age males (30-54) was fairly constant, at over 90 percent. For young males, Algeria witnessed an increase in labor force participation rates, from fairly low levels in the 1970s. However, the other five countries

all witnessed declines in the labor force participation rates of male youth, probably due to increases in educational attainment throughout MENA during this period, which tend to delay labor force entry.

Female labor force participation rates increased among all age groups for all countries in Table 2.6, except Iran. For Iran, female participation rates declined for all age groups between the mid-1970s and mid-1980s, in the aftermath of the 1979 Revolution, rising again during the 1990s. For the 15-19 age group, female participation increased from under 5 percent during the 1970s in Algeria, Bahrain, and Egypt to around 10 percent. For the 20-24 age group, participation rates increased substantially between the mid-1970s to mid-1990s for all countries except Tunisia (which already had high female participation rates compared to other MENA countries) and Iran.

**Table 2.6 Labor Force Participation Trends (1970s-1990s)**

	Age Group	Labor Force Participation Rates Females				Labor Force Participation Rates Males			
		15-19	20-24	25-29	30-54	15-19	20-24	25-29	30-54
<b>Algeria</b>	1977	3.1	6.2	5.3	3.3	23.3	60.8	88.1	79.7
	1987	3.9	12.9	12.9	7.5	39.2	84.4	95.7	96.3
	1996 *	10.4	21	18.7	9.3	50.5	81.9	93.2	95.9
	Δ (77-96)	235%	239%	253%	182%	117%	35%	6%	20%
<b>Bahrain</b>	1971	3.1	11.6	10.2	5.8	42.8	88.4	97.7	97
	1981	8.4	31.5	31.1	15.7	30	89.2	98.1	98.4
	1991	8.3	37	42	33.6	24.7	87.9	98	99
	Δ (71-91)	168%	219%	312%	479%	-42%	-1%	0%	2%
<b>Egypt</b>	1976	5.1	12.5	10.8	5.1	50.2	74.6	93.8	98
	1986	5.9	18.9	16.8	8.8	39.4	78.5	95	96.9
	1998 **	11.2	25.3	24.7	21.6	30.2	59	75.6	94.2
	Δ (76-98)	120%	102%	129%	324%	-40%	-21%	-19%	-4%
<b>Iran</b>	1976	15.7	17.9	16.1	12	53.3	86.4	95.7	96.6
	1986	9.4	12	11.1	8.6	50.4	86.3	94.1	94.6
	1996	11.1	14	11.5	9.2	42.5	83	94.3	95.9
	Δ (76-96)	-29%	-22%	-29%	-23%	-20%	-4%	-1%	-1%
<b>Kuwait</b>	1975	4.2	15	19.7	17.9	31.4	79.9	94.8	96.6
	1985	6.3	37.1	47.4	35.5	14.2	79.7	97.7	96.3
	1995	1.7	36.6	62.3	54.5	8.2	73.8	95.6	96
	Δ (75-95)	-60%	144%	216%	204%	-74%	-8%	1%	-1%
<b>Tunisia</b>	1975	29.5	27.5	21.8	14.6	64	85.4	99.3	97.8
	1984	25.2	38.1	29.4	17	54.8	80.5	95.3	96.6
	1994	24.9	34.5	33.2	21.6	44.5	65	89.4	95.6
	Δ (75-94)	-16%	25%	52%	48%	-30%	-24%	-10%	-2%

Source: LABORSTA (2003). Note: All data are from population censuses, except (\*) from a household survey and (\*\*) from a labor force survey

### 3. LABOR SUPPLY FACTORS CONTRIBUTING TO THE YOUTH EMPLOYMENT SITUATION

#### 3.1 Labor Supply and the Demographic Transition in MENA

Across most regions of the world, the share of young people in the population has been falling. The exceptions have been MENA and Sub-Saharan Africa (O'Higgins, 2003). It has long been thought that demographic pressures in MENA might be a leading cause of the high youth unemployment rates in the region. The origins of the current demographic trends began in the 1950s. Over the past fifty years, MENA countries experienced large declines in fertility and infant mortality rates. Infant mortality rates declined steadily between 1960 and 2000, by 2.1 percent per year between 1960 and 1980 and 2.5 percent per year between 1980 and 2000, compared to 1.6 percent per year worldwide between 1960 and 2000. Fertility rates, however, declined slowly at first, falling from 7.2 children per woman in 1960 to 6.2 children per woman in 1980 – only 0.7 percent per year compared 1 percent worldwide. Between 1980 and 2000, the MENA region experienced a sizable decline in fertility rates, falling by 2.3 percent per year compared to 1.4 percent worldwide (Table 3.1).

**Table 3.1 Total Fertility and Infant Mortality Rates, World & MENA (1960-2000)**

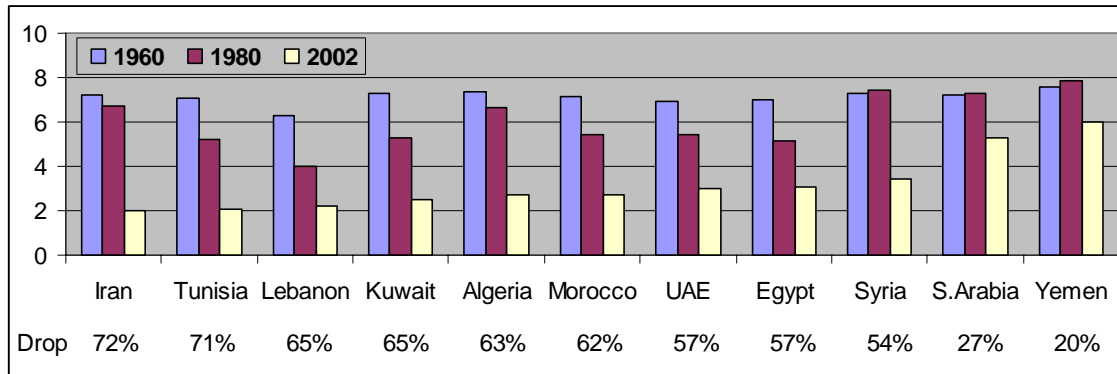
	1960	1970	1980	1990	2000	Annual Percent Change	
						1960-1980	1980-2000
<b>Infant Mortality Rate</b>							
WORLD	12%	10%	8%	6%	6%	-1.8%	-1.4%
OECD	4%	2%	1%	1%	1%	-3.3%	-2.7%
EAP	13%	9%	6%	4%	3%	-2.9%	-2.0%
LAC	10%	9%	6%	4%	3%	-2.0%	-2.5%
<b>MENA</b>	<b>16%</b>	<b>13%</b>	<b>9%</b>	<b>6%</b>	<b>5%</b>	<b>-2.1%</b>	<b>-2.5%</b>
SA	15%	13%	11%	9%	7%	-1.1%	-1.9%
SSA	16%	14%	12%	11%	10%	-1.5%	-0.5%
<b>Fertility Rate (births/woman)</b>							
WORLD	4.6	4.8	3.7	3.1	2.7	-1.0%	-1.4%
OECD	2.9	2.4	1.8	1.7	1.7	-1.9%	-0.4%
EAP	4.1	5.7	3.1	2.4	2.1	-1.2%	-1.6%
LAC	6.0	5.3	4.1	3.1	2.6	-1.6%	-1.9%
<b>MENA</b>	<b>7.2</b>	<b>6.8</b>	<b>6.2</b>	<b>4.8</b>	<b>3.3</b>	<b>-0.7%</b>	<b>-2.3%</b>
SA	6.6	6.0	5.3	4.1	3.3	-1.0%	-1.9%
SSA	6.6	6.6	6.6	6.1	5.3	0.0%	-1.0%

Source: World Development Indicators (WDI, 2004)

Declines in fertility rates occurred across all countries in the MENA region. The largest decline was in Iran, where fertility rates fell by 70 percent between 1989 and 2002

alone, following the successful implementation of a family planning program (Roudi-Fahimi, 2002). Furthermore, for all MENA countries with available data, fertility rates declined more steeply between 1980 and 2000 than between 1960 and 1980 (Figure 3.1).

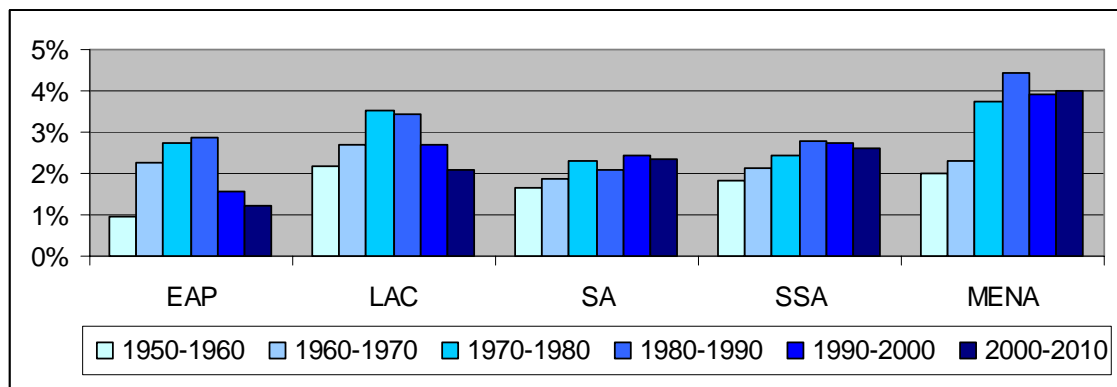
**Figure 3.1 Fertility Rates, across MENA Countries (1960-2002)**



Source: WDI (2003)

The combination of low infant mortality rates and high fertility rates between 1950 and 1980 led to high population growth rates, which translated into high labor force growth rates from 1970 through 2000 and beyond. Labor force growth accelerated from 2.1 percent per year in the 1960s, to 3.1 percent in the 1970s, 3.4 percent in the 1980s, and 3.6 percent in the 1990s (Figure 3.2). In absolute numbers, from 1950 to 1990, around 47 million workers were added to the labor force. An additional 32 million workers were added during the 1990s and another 42 million will be added this decade (World Bank, 2004).

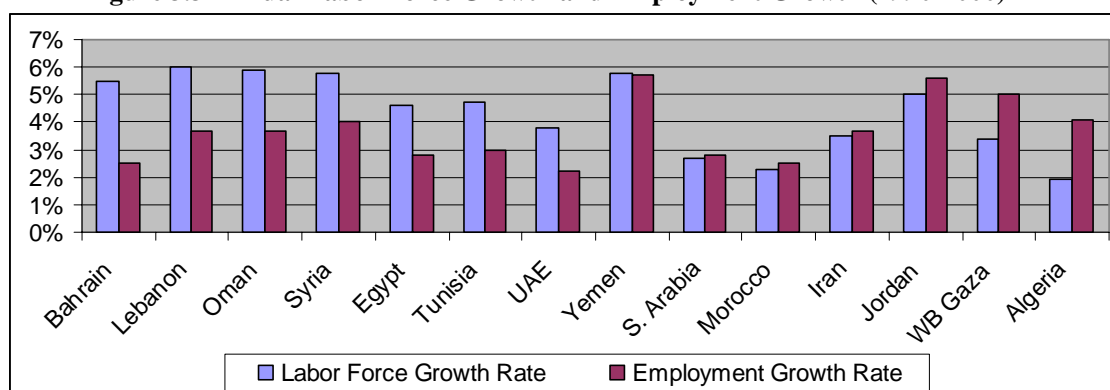
**Figure 3.2 Labor Force Growth Rates, by Region**



Source: LABORSTA (1996)

Thus, since the 1970s, MENA has faced the highest sustained labor force pressures in the world. According to ILO estimates, between 1990 and 2000, employment growth failed to keep pace with labor force growth in most MENA countries (Figure 3.3). Except for Jordan, in countries where employment growth did exceed labor force growth, labor force growth rates were relatively low, suggesting that individuals may have opted to remain out of the labor force, possibly due to adverse employment conditions. Indeed, the countries with the highest employment growth relative to labor force growth (Jordan, the West Bank and Gaza, and Algeria) also had the highest unemployment rates in the MENA region (Table 2.1).

**Figure 3.3 Annual Labor Force Growth and Employment Growth (1990-2000)**

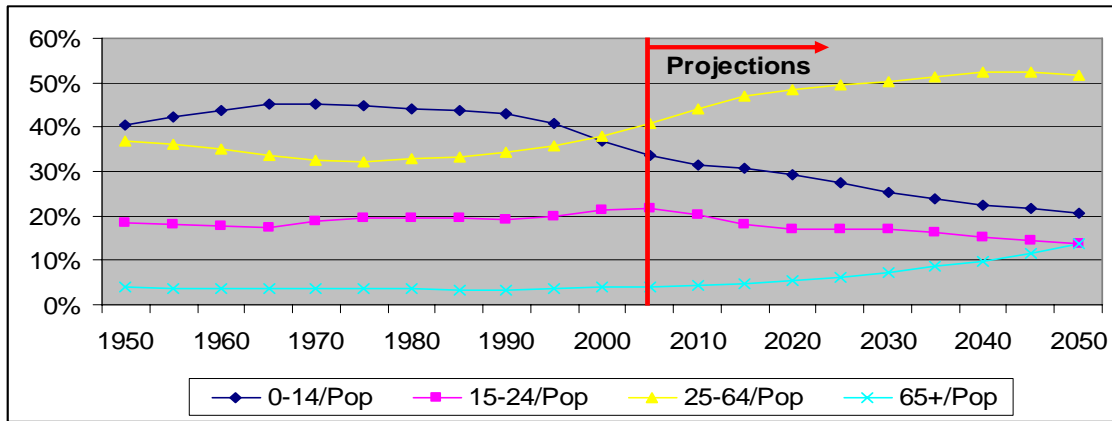


Source: LABORSTA (2003)

The demographic wave of young people moving into the MENA labor force has caused alarm among some observers. One often-cited figure is that the MENA region must create 100 million jobs by 2020 in order to stabilize its employment situation (Keller and Nabli, 2002). However, the demographic wave has already begun to subside as the young cohorts enter mid-career (Figure 3.4). Indeed, the share of youth (15-24 year-olds) in the population is expected to reach a peak of 22 percent of the population in 2005, before declining steadily to 15 percent by 2040. It is the share of 25-64 year-olds in the population that is expected to expand, from 38 percent in 2000 to over 50 percent by 2030.



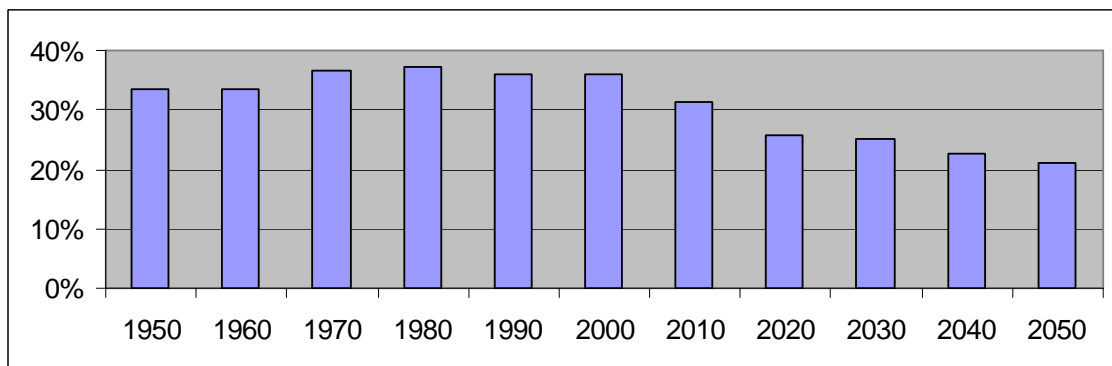
**Figure 3.4 Age Groups as a Proportion of the Total Population (1950-2050)**



Source: UN Population Prospects (UNPP, 2004)

As the share of 15-24 year-olds in the population falls, and the share of adults rises, the proportion of youth in the *working-age population* is expected to decline from 36 percent in 2000 to 21 percent by 2050 (Figure 3.5). So, even though large numbers of jobs must be created to accommodate the young workers currently entering the labor force, *if* suitable jobs for these young workers are found, labor supply pressures are likely to ease in the near future.

**Figure 3.5 Proportion of Youth in the Working-Age Population (1950-2050)**

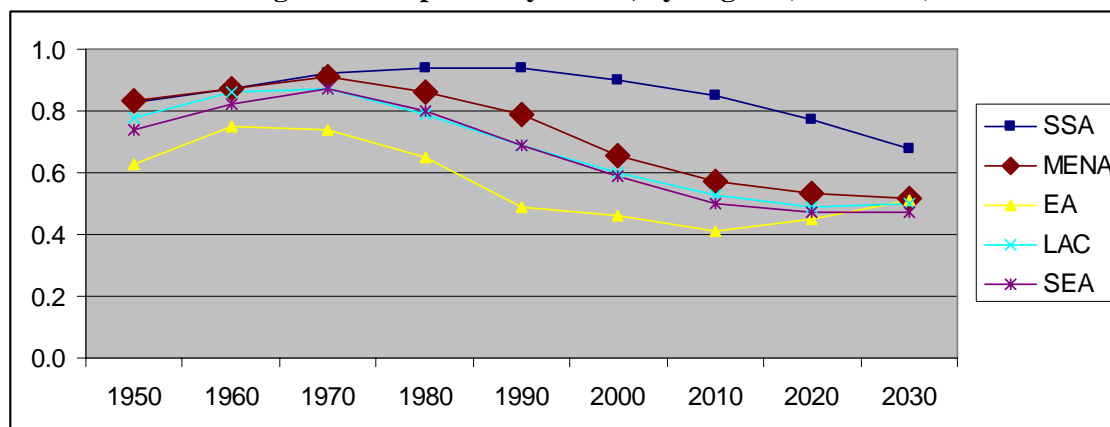


Source: UNPP (2003)

As a result of the demographic wave currently passing through the labor market, the dependency ratio (the ratio of the economically dependent population to the working age population) has decreased substantially during the past 30 years, falling from 0.91 in 1970 to 0.66 in 2000, and it is expected to continue to decline, reaching 0.5 by 2030

(Figure 3.6). The large working-age cohort will be supporting a smaller number than usual of dependents, providing a “window of opportunity” for higher savings, greater economic growth, and improved standards of living (World Bank, 2004; Dhonte et al., 2001).

**Figure 3.6 Dependency Ratios, by Region (1950-2030)**



Source: UNPP (2003)

To what extent do demographic trends account for the high rates of unemployment and joblessness among MENA youth? The research literature suggests that a large influx of workers into a labor market in itself does not necessarily increase unemployment. If labor markets operate efficiently, new entrants can be absorbed into the economic activities of a labor market without substantially affecting unemployment rates, although average wages rates may fall. Empirical evidence suggests that macroeconomic conditions are more important determinants of both youth and adult unemployment rates than demographic changes (O’Higgins, 2003; Korenman and Neumark, 1997).

There is even evidence, from the United States, that higher population shares of youth may actually *reduce* the unemployment rates of both young workers and adult workers and *raise* the labor force participation rates of young workers. Shimer (1999) finds that a 1 percent increase in the youth population share *reduces* the unemployment rate of young workers by more than 1 percent and of adult workers by more than 2 percent. Foote (2002) suggests that these results could be because young workers increase the demand for housing, which in turn increases labor demand. One could also look at the other side of demographic trends. In most industrialized countries, *falling* youth population shares and rising employment in high technology sectors during the

1990s were expected to improve labor market outcomes for youth. However, youth employment conditions in many industrialized countries deteriorated in recent years, mostly due to macroeconomic conditions (Ryan, 2001).

Thus, macroeconomic conditions appear to affect youth unemployment more than demographic trends. Furthermore, higher population shares of youth are not necessarily associated with higher unemployment rates, when labor and financial markets are flexible. The problem with the MENA region, and other developing regions, is that labor markets may not be very flexible or efficient and therefore may not be able to fully absorb the new entrants. Using a panel of developing and transition economies, O'Higgins (2003) finds that the share of young individuals in the working-age population *is* associated with higher rates of unemployment among youth, although not as strongly as macroeconomic conditions. Furthermore, it remains unclear which labor market features are most important in insuring that labor markets can absorb incoming cohorts.

In sum, the MENA region experienced substantial population and labor force growth over the past 30 years. While these labor supply pressures likely contributed to the high rates of youth unemployment currently affecting the region, previous research suggests that large influxes of young workers do not necessarily, on their own, increase unemployment rates. The magnitude, and even direction, of the relationship depends on both macroeconomic conditions and on the flexibility of the local labor markets. In addition, the labor supply pressures in MENA from young cohorts are likely to ease over the coming decade as the demographic wave affecting the region moves into mid-career. Both our situational assessment and literature review suggest that policies aimed at improving labor market flexibility and creating a favorable business environment may be more important for improving youth employment outcomes in the region than policies aimed at controlling current demographic trends. Such policies should be adopted quickly if MENA countries are to fully benefit from the “window of opportunity” presented by declining dependency ratios.

### **3.2 Female Labor Force Participation**

We have already noted that female labor force participation rates in the MENA region are the lowest in the world, at 29 percent for female adults and 24 percent for female youth (Table 2.5). For youth, low labor force participation rates may mask high levels of school enrollment. Gender differences in labor force participation rates are

therefore better examined by looking at the proportion of female workers in the youth labor force. As was the case with labor force participation rates, ILO estimates and projections of the proportion of young female workers in the youth labor force is low across all MENA countries, with an average of 32 percent, compared to 43 percent worldwide. Again, the highest rate is for Morocco at 40 percent (Table 3.2). The share of young females in the labor force is especially low among GCC countries, ranging between 22 and 24 percent of the youth labor force in UAE, Qatar, Saudi Arabia and Oman. However, in Kuwait, 36 percent of its youth labor force was young females, comparable to the non-GCC average.

**Table 3.2 Share of Young Female Workers in the Labor Force (1960-2000)**

	1960	1980	2000	Change 1960-2000
<b>World</b>	39%	42%	43%	4%
<b>MENA</b>	21%	26%	32%	11%
Morocco	27%	36%	40%	13%
Tunisia	25%	35%	39%	15%
Lebanon	19%	33%	39%	20%
Kuwait	3%	14%	36%	33%
Egypt	25%	29%	34%	10%
Iran	18%	22%	33%	15%
Syria	23%	26%	32%	8%
Libya	19%	24%	31%	12%
Bahrain	0%	18%	31%	31%
Algeria	17%	22%	31%	13%
Jordan	17%	20%	30%	13%
Yemen	25%	33%	28%	3%
UAE	0%	6%	24%	24%
Qatar	0%	5%	24%	24%
S. Arabia	4%	10%	24%	20%
Oman	4%	6%	22%	18%

*Source: ILO (1996)*

The low rates of female labor force participation in MENA have been the subject of much discussion and research. Using data for Lebanon, Hajj and Panizza (2002) find that educational attainment is strongly associated with labor force participation among females. However, for married women, once the education level of the husband is controlled for, the education level of the wife has a much smaller effect, suggesting that intra-household decisions may dominate the income effect associated with higher wages that come with higher educational attainment. Fertility may also affect the labor force participation decision. However, after controlling for the endogeneity of fertility in the

labor force participation equation, Hajj and Panizza (2002) find no significant relationship between childbearing and labor force participation among young Lebanese women.

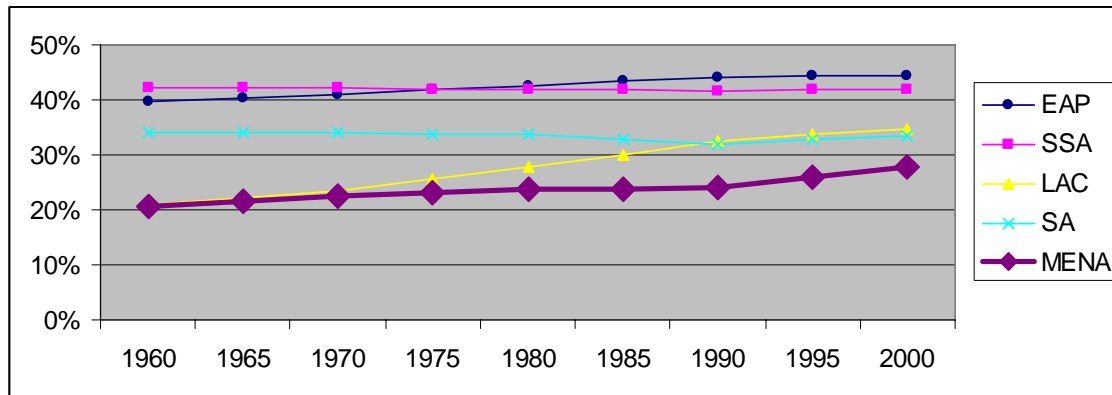
Using data for Egypt, Amin and Al-Bassui (2003) suggest that young females are likely to work primarily to help cover the costs of marriage and establishing a household. However, Egyptian females often quit work after marriage. The researchers suggest that recent increases in the proportion of young Egyptian females working and in school might be the result of a tendency to delay marriage due to increasing costs of getting married. By contrast, Assaad and Zouari (2002) find that, for women in Morocco, marriage is not a constraint on labor force participation, but that the presence of young children is. Unlike in Egypt, young Moroccan women do continue to work after marriage. But, unlike Lebanon, having children greatly reduces the odds of working. One explanation appears to be employer constraints. Participation rates do not drop off as sharply for females working in the public sector, which provides more benefits and accommodations to working mothers.

The results of these three studies, from three different MENA countries, suggest that, while female labor force participation rates are low across all MENA countries, the dynamics underlying the reasons for these low participation rates may be quite different. It might be tempting to attribute the low levels of female labor force participation to cultural norms or religious practices. While some evidence supports this hypothesis (Miles, 2002; Assaad and Arntz, 2005), other research is less clear. For Lebanon, a country with a large Christian population, there is no apparent association between low female participation rates and religion (Hajj and Panizza, 2001). In Egypt, 83 percent of married working women surveyed indicated that their husbands accepted or firmly accepted their working. For unmarried working women, only 2.5 percent indicated that they believed that working would adversely affect their prospects of getting married (Assaad and Zouari, 2002).

Female labor force participation rates have been on the rise. From relatively low levels, the share of young females in the MENA labor force increased by an estimated 11 percentage points between 1960 and 2000, compared to only 4 percentage points worldwide (Table 3.2). This trend, however, differs substantially between MENA countries, with the largest increases in GCC countries (ranging from 18 percentage points in Oman to 33 percentage points in Kuwait) and lower increases in non-GCC countries, ranging from 3 percentage points in Yemen to 20 percentage points in Lebanon (Table

3.2). Furthermore, most of the increase occurred during the past decade. The proportion of female workers in the labor force increased slowly from 20.7 in 1960 to 23.9 percent in 1990, before jumping to 28.1 percent in 2001 (Figure 3.7). Indeed, during the 1990s, female labor force participation rates in MENA increased by an average of 1.6 percent per year, faster than any other region in the world.

**Figure 3.7 Female Workers as a Proportion of Total Labor Force**



Source: WDI (2004)

Increases in female labor force participation cut across all age groups but are most evident among young women. Table 3.3 presents labor force participation trends for six MENA countries with available census data over three decades. The largest increases are in the labor force participation rates of younger cohorts. In Algeria and Bahrain, participation rates for 15-24 year old females who had been born in the 1970s were 3-4 times higher than participation rates of young females born in the 1950s. In Egypt and Kuwait, they were more than twice as high. In Tunisia, participation rates remained unchanged, but were relatively high to begin with. Participation rates increased slightly for 25-34 year olds, suggesting that part of the reason was increased time in school. In Iran, participation rates of young females actually declined for those born in the 1970s compared to those born in the 1950s. The main cause for this decline appears to be the 1979 Revolution, but part of it also reflects delayed entry into the labor force, possibly due to higher levels of schooling. The labor force participation rates of 25-34 year old females declined for those born in the 1960s, compared to the 1950s, but then partly reversed direction for those born in the 1970s.

**Table 3.3 Female Labor Force Participation Rates, by Age Group & Cohort**

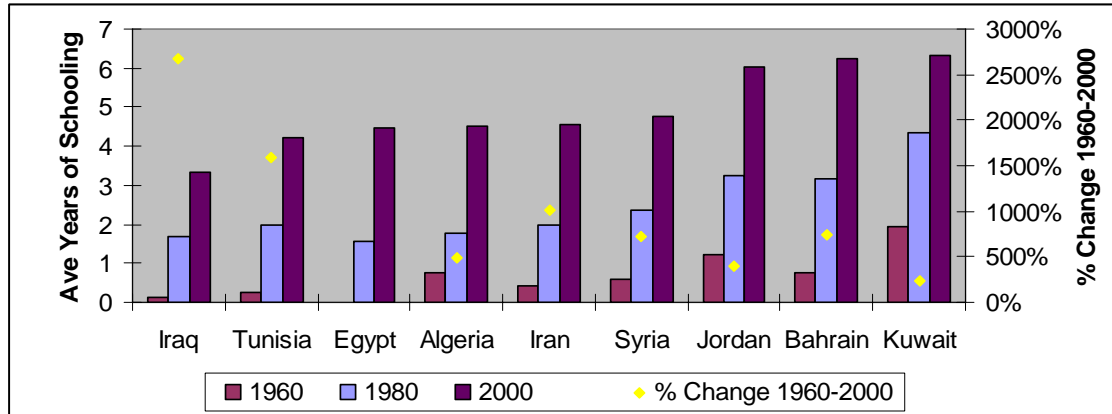
	Born in	15-24	25-34	35-44	45-54	55-64
<b>Algeria</b>	<b>1930s</b>			3.1%	6.2%	6.5%*
	<b>1940s</b>		4.6%	7.4%	9.2%*	
	<b>1950s</b>	4.5%	11.1%	8.2%*		
	<b>1960s</b>	8.2%	15.2%*			
	<b>1970s</b>	15.3%*				
<b>Bahrain***</b>	<b>1930s</b>			6.5%	8.0%	3.5%
	<b>1940s</b>		8.6%	15.2%	13.9%	
	<b>1950s</b>	6.4%	28.5%	35.7%		
	<b>1960s</b>	19.6%	41.9%			
	<b>1970s</b>	23.7%				
<b>Egypt</b>	<b>1930s</b>			6.0%	4.5%	9%**
	<b>1940s</b>		8.7%	8.7%	20%**	
	<b>1950s</b>	8.5%	15.6%	24%**		
	<b>1960s</b>	11.9%	25%**			
	<b>1970s</b>	17.2%**				
<b>Iran</b>	<b>1930s</b>			12.9%	5.8%	5.0%
	<b>1940s</b>		14.5%	8.7%	8.8%	
	<b>1950s</b>	16.7%	11.2%	13.0%		
	<b>1960s</b>	10.6%	13.6%			
	<b>1970s</b>	10.6%				
<b>Kuwait</b>	<b>1930s</b>			19.5%	21.9%	8.7%
	<b>1940s</b>		19.6%	34.3%	28.5%	
	<b>1950s</b>	9.5%	46.4%	57.0%		
	<b>1960s</b>	21.6%	63.8%			
	<b>1970s</b>	20.5%				
<b>Tunisia</b>	<b>1930s</b>			14.3%	12.3%	8.5%
	<b>1940s</b>		19.2%	16.9%	15.3%	
	<b>1950s</b>	28.6%	26.9%	21.9%		
	<b>1960s</b>	31.1%	30.3%			
	<b>1970s</b>	29.4%				

*Source: LABORSTA (2003). All data are from population censuses, except (\*) from a household survey and (\*\*) from a labor force survey. \*\*\* Cohorts for Bahrain were born in the mid-1920s / mid-1930s, mid-1930s / mid-1940s, etc.*

Rising female labor force participation rates are thought to be the result of declining fertility rates, higher educational attainment, and a trend towards women's emancipation in the region (World Bank, 2004). Fertility rates declined by over 50 percent in the past four decades, falling from over 7 children per woman in 1960 to just over 3 children in 2002, with most of the decline taking place after 1980 (Table 3.1). Female educational attainment increased dramatically in MENA, more than any other region in the world (Figure 3.8). Higher levels of education are strongly and directly associated with increased labor force participation, by increasing productivity and wages, which in turn increase the opportunity cost of not working. In addition, educational

attainment influences labor force participation indirectly by allowing women to better regulate their fertility.

**Figure 3.8 Female Educational Attainment, MENA Countries (1960-2000)**



Source: Barro and Lee (2000)

The large increase in female labor force participation rates during the 1990s may have contributed to the high rates of unemployment, especially among young females. Earlier, we observed that the regional unemployment rates among females and female youth were the highest in the world, both in absolute terms and compared to unemployment rates for males (Table 2.3). However, gender differences in unemployment rates differ markedly across MENA countries. Table 3.4 ranks MENA countries according to the relative difference in the unemployment rates of female and male youth. For 7 of the 13 countries listed, the unemployment rate for females is higher than that for males. This is not unusual. According to data from the Statistics Division of the United Nations, 66 percent of the countries with available data have higher unemployment rates for working-age females than for males. What is raising the MENA regional average is that gender differences are very large for a few countries. In Qatar, Egypt, Syria, Saudi Arabia, and Bahrain, unemployment rates for female youth are 50 percent higher than for male youth, reaching 3.9 times higher in Qatar and 2.7 times higher in Egypt.

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 (World Bank, 2004b). However, most of the differences again remain unexplained, leading Seguino to suggest possible discrimination.

**Table 3.4 Gender Differences in Youth Unemployment Rates, Ordered in Terms of the Ratio of Female / Male Unemployment Rates**

	Survey Year	Male Youth	Female Youth	Difference Female – Male	Female / Male Youth Unemployment Rate
Qatar	2004	8%	30%	22%	3.9
Egypt	2001	19%	51%	32%	2.7
Syria	2002	21%	39%	18%	1.8
S. Arabia	2002	25%	39%	14%	1.6
Bahrain*	2001	17%	27%	10%	1.6
Jordan	2004	28%	43%	15%	1.5
Iran	1996	18%	27%	9%	1.5
Morocco*	2003	17%	16%	-1%	0.9
UAE	1995	6%	6%	0%	0.9
WB Gaza	2002	43%	37%	-6%	0.8
Yemen	1999	21%	14%	-7%	0.7
Lebanon*	1997	24%	14%	-10%	0.6
Kuwait	1995	16%	8%	-8%	0.5

*Sources: ILO (2004c), Jordan DOS (2004), Planning Council of Qatar (2005)*

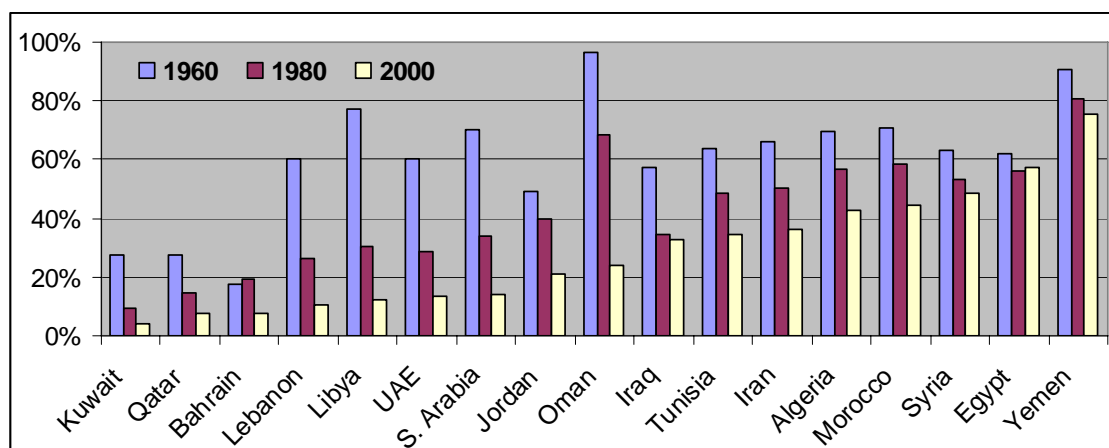
In the MENA region, it is tempting to attribute part of the large gender differences in unemployment rates to increases in relative female labor force participation. To the extent that males and females tend to work in different occupations, higher rates of female entry into the labor force may lead 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). For example, commuting times for male workers in Egypt increased in recent years, but female workers have been unable to match this increase placing them at a disadvantage in terms of looking for work (Assaad and Arntz, 2005). 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. Many establishments in MENA countries might not be considered appropriate for female workers. Using data from the 1998 Egypt Labor Market Survey, we find that over two thirds of survey respondents indicated that they worked in establishments with no female workers. Most of these establishments were small private firms (1-4 workers) and were most often described as a shop, garage/factory, or mobile workplace – places where Egyptian women are not likely to seek work anyway. We also consider the influence of marriage, fertility, and other factors on gender differences in unemployment rates in Egypt. Using a logistic regression model, we find that marriage and children can explain about 25 percent of the difference. However, these factors worked through reducing the likelihood of unemployment among males rather than increasing the likelihood of unemployment among females.

### **3.3 Rural-Urban Transitions and International Labor Migration**

In 1960, only 33 percent of the MENA population lived in cities. By 2020, an estimated 70 percent of the region's population will be urban. The average annual growth rate of the urban population for 1990-2000 was 3.3 percent, compared to an average annual population increase of 2.3 percent for the same period. By 2000, urban areas were estimated to contain over 80 percent of the populations in 9 MENA countries and more than 50 percent of the population in all MENA countries, except for Egypt (42 percent) and Yemen (27 percent), which remain predominantly rural (Figure 3.9).

**Figure 3.9 Rural Population, by MENA Country (1960-2000)**



Source: UNPP (2003)

These trends, however, do not represent the full extent of urbanization in MENA. McCormick and Wahba (2004) found that only 1.4 percent of surveyed Egyptian households migrated between rural and urban areas between 1991 and 1998<sup>5</sup>. However, 4.7 percent of male workers and 1 percent of female workers surveyed indicated that their *work locations* changed from rural to urban areas. The “work” migration probabilities for youth (both the 15-19 and 20-29 age groups) were 40 percent higher than for the 30-39 age group and more than 80 percent higher than the 40-59 age group. This indicates that many Egyptian youth are seeking *employment* in urban locations, even if they do not live in urban areas.

In the 1999 Morocco Labor Force Survey, 7.4 percent of respondents indicated that they moved sometime during the 5 years prior to the survey. Most moves took place within urban areas (50 percent) and from rural to urban areas (24 percent). Around 44 percent of males and 2 percent of females indicated that they migrated from rural to urban areas for employment reasons and 27 percent of males and 89 percent for females indicated that they migrated for family reasons (Table 3.5).

<sup>5</sup> This estimate does not include households that moved from rural to urban (or urban to rural) and back again.

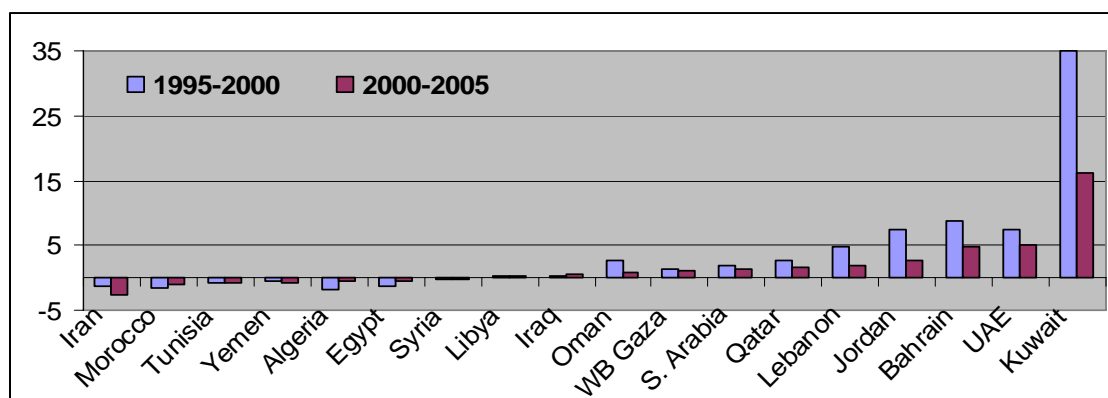
**Table 3.5 Reasons for Migrating in Morocco, by Gender (1999)**

	Employment Reasons	Family Reasons	Other*
<b>Male</b>			
Urban to Rural	17.8	66.83	15.37
Rural to Urban	44.19	27.48	28.33
<b>Female</b>			
Urban to Rural	1.8	94.4	3.8
Rural to Urban	2.17	88.84	8.99

Source: 1999 Moroccan Labor Market Survey. \*Note: other includes health and housing reasons.

There is also a great deal of migration between countries, especially between non-oil producing countries and members of the GCC (Figure 3.10). Data on international migration is scarce, but it is recognized that large numbers of young workers migrated to GCC countries relieving much labor supply pressure in their home countries. For example, nearly 400,000 Jordanians were estimated to have been working abroad in 1980. This represented nearly one fifth of the population. Between 1980 and 1989, an additional 410,000 left the country. While there is no information about the age distribution of these migrants, they are perceived to be young, educated, and economically-motivated males (Kanaan and Kardoosh, 2002).

**Figure 3.10 Net Migration, across MENA Countries (per 1000 population)**



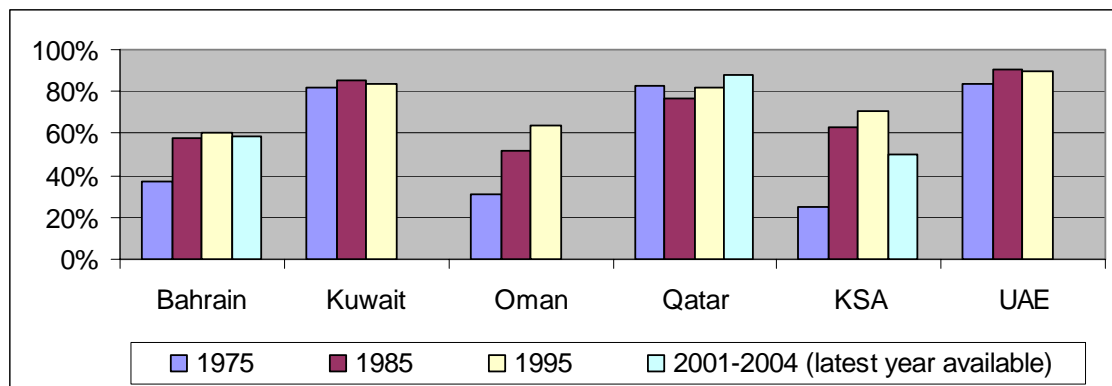
Source: UNPP (2003)

Migrating workers can relieve labor supply pressures in their home country. Migration can be helpful to the home economy during periods of high structural unemployment when migrating workers would have a difficult time finding work anyway. However, if migrants are primarily the highly skilled and motivated workers, migration could be a drain on human capital resources. This brain drain is partly mitigated by remittances. In addition, migrant workers often do return to their home country. For Egypt, the average age of returning migrant workers was 33 in 1988. The

evidence suggests that those who did not retire were able to assimilate back into the workforce and many had accumulated savings and were more likely to become entrepreneurs upon their return (McCormick and Wahba, 2000).

Reliable figures on the numbers and educational levels of migrating young workers are largely unavailable, precluding a detailed analysis of the issue. However, there is some information about the numbers of expatriate workers in host countries. Expatriate workers make up between 50 and 90 percent of the labor force in GCC countries, and some argue that they are taking jobs away from national workers and contributing to the large youth unemployment problem in these countries (Figure 3.11). In Bahrain, the share of expatriate workers has held steady at around 60 percent. In Qatar, the share of expatriate workers has increased over the past 20 years, reaching 88 percent in 2004. Saudi Arabia experienced a decline in the share of expatriate workers, dropping to only 50 percent in 2002 – a result of successful policies to encourage the hiring of Saudi nationals, especially in the public sector (Fasano and Goyal, 2004).

**Figure 3.11 Share of Expatriate Workers in the Total Workforce (1975-1995 & 2001-04)**



Source: Girgis (2002), Bahrain CIO (2002), Saudi CDS (2003), Planning Council of Qatar (2005)

The evidence from the research literature in industrialized countries suggests that large influxes of immigrant workers do not necessarily have much of an effect on local unemployment rates or even wage rates (Card, 1990; Hunt, 1992). However, Angrist and Kugler (2003) suggest that the disemployment effects of increased immigration are higher in countries with higher degrees of labor market rigidity. Little is known about the employment effects of immigration in developing countries, including countries in the MENA region. Between 1991 and 1995, Jordan’s labor force increased by nearly 90 percent, largely due to an influx of Jordanians who returned from GCC countries after the

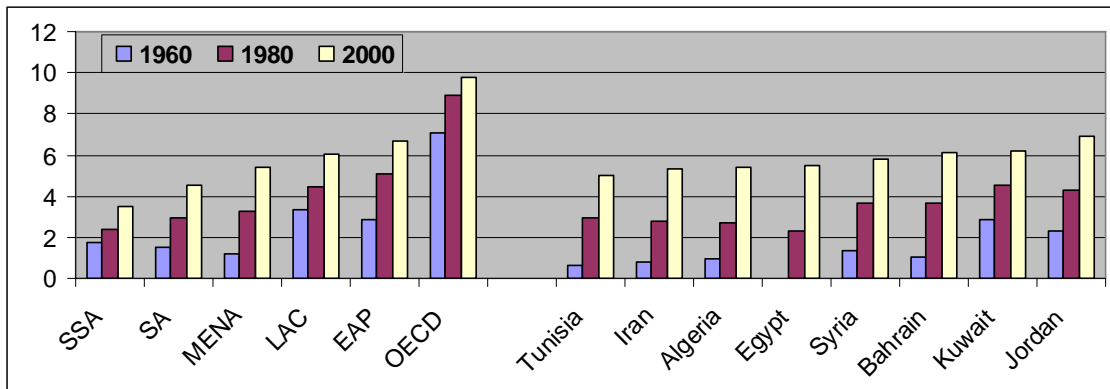
first Gulf War. The unemployment rate barely responded, and actually *fell* from 17 percent in 1991 to 15 percent in 2000 (Kanaan and Kardoosh, 2002). No firm conclusions should be inferred from this lack of correlation. Returning immigrant workers may have prevented the high unemployment rate in Jordan from adjusting to lower levels. Also, the fact that many of the returning Jordanians brought with them large amounts of savings and started their own businesses no doubt played a role in generating the level of economic activity necessary to keep unemployment rates level.

In terms of the GCC, there is little direct evidence of the relationship between youth employment opportunities and the presence of migrant workers. Many, if not most, migrant workers are in the types of service occupations that national workers are not willing to do. Others are in technical fields that do not have an adequate supply of national workers to meet local demand. If anything, these two groups complement the national workforce and may improve employment opportunities for young nationals. Qatar and the UAE, two countries with among the most liberal economies in the GCC and highest proportion of expatriate workers, have among the lowest youth unemployment rates in region. Whereas Saudi Arabia, which experienced the largest declines in the proportion of expatriate workers among GCC countries, has among the highest youth unemployment rates in the region, reaching 37 percent among nationals. The point here is not to suggest causality. Simply increasing the proportion of migrate workers will not necessarily lower youth unemployment rates, just as simply reducing expatriate workers will not necessarily lower it. What GCC countries need to do to reduce unemployment and joblessness among their youth is develop a comprehensive strategy that encourages young nationals to acquire skills in technical occupations with adequate labor demand.

### **3.4 Labor Supply and the Role of Education**

The commitment of MENA governments to education has been impressive. Average years of schooling (for those 15 years and older) increased by more than 400 percent between 1960 and 2000, more than any other region in the world. In 1999, average years of schooling in MENA was 5.3 years, ahead of South Asia (4.6 years) and Sub-Saharan Africa (3.5 years), and only one year behind East Asia (6.6 years) and Latin America and the Caribbean (6.4 years). Educational gains are apparent across all countries in the region (Figure 3.12).

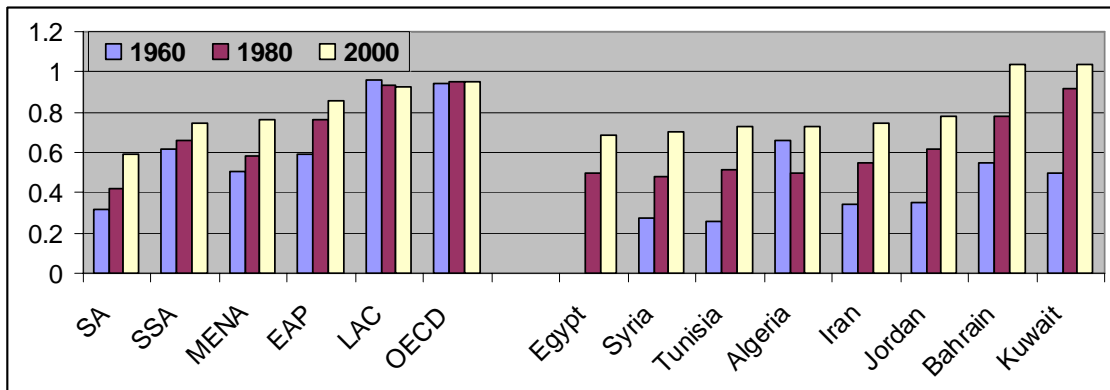
**Figure 3.12 Average Years of Schooling, by Region (1960-2000)**



Source: Barro and Lee (2000)

Improvements in female education are also impressive. Not only have females in MENA caught up with their regional counterparts in terms of educational attainment, but they are also closing the gender gap within some MENA countries like Bahrain and Kuwait. Regionally, the ratio of female-to-male years of schooling increased from 0.51 in 1960 to 0.76 in 2000 (Figure 3.13).

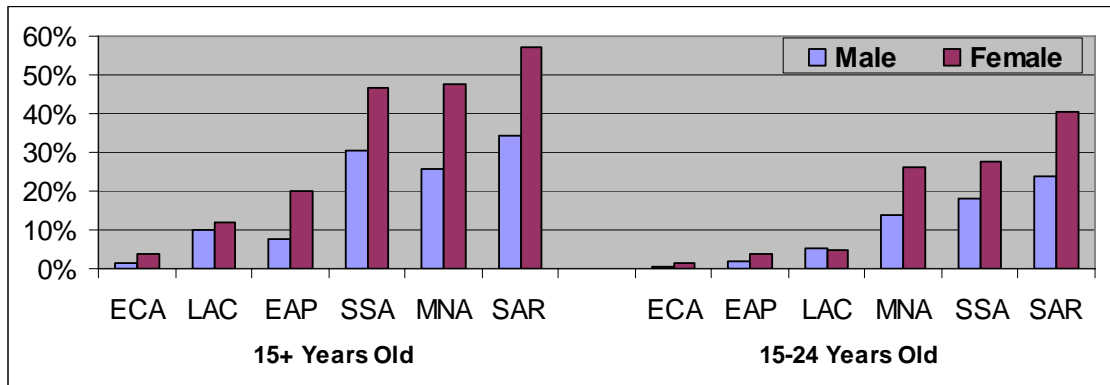
**3.13 Average Years of Educational Attainment, Female/Male Ratio (1960-2000)**



Source: Barro and Lee (2000)

With respect to illiteracy rates, however, the MENA region still lags behind other regions of the world. Fully 36 percent of those 15 years and older were illiterate in 2000. While this rate is lower than in Sub-Saharan Africa and South Asia, it is three times higher than in Latin American and East Asia. Furthermore, at 47 percent, the illiteracy rate among MENA females is even higher than in Sub-Saharan Africa (Figure 3.14) and the gender gap in illiteracy rates is among the highest in the world. Thus, major gender differences persist among the less educated segments of the MENA population.

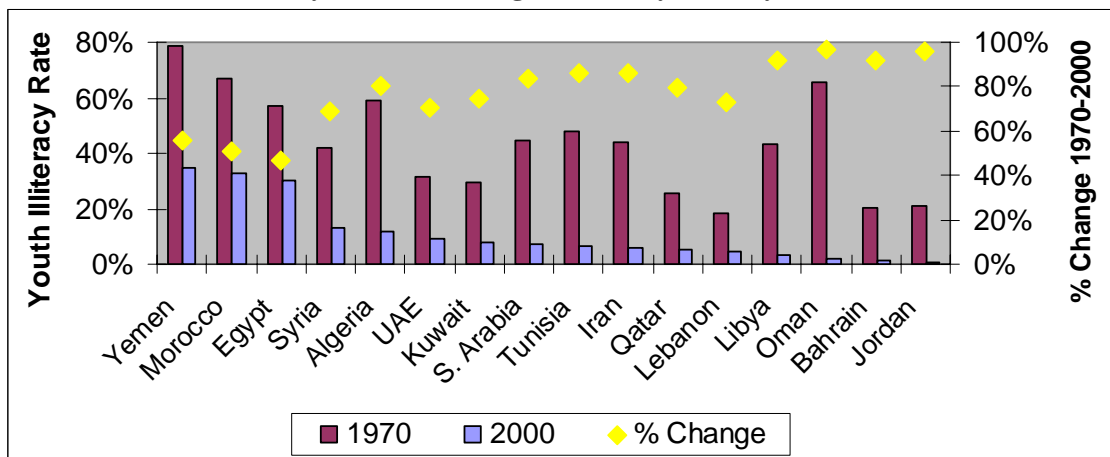
**Figure 3.14 Illiteracy Rates Total Population and Youth, by Region (2000)**



Source: WDI (2003)

Nonetheless, the decline in illiteracy rates among MENA youth suggests that the situation is improving. From an average of 70 percent in 1970, illiteracy rates among female youth fell to 26 percent in 2000. By 2000, the majority of MENA countries had female youth illiteracy rates of less than 10 percent (Figure 3.15). The main exceptions were Yemen (35 percent), Morocco (33 percent), and Egypt (30 percent).

**3.15 Illiteracy Rates for Young Females, by Country (1970-2000)**

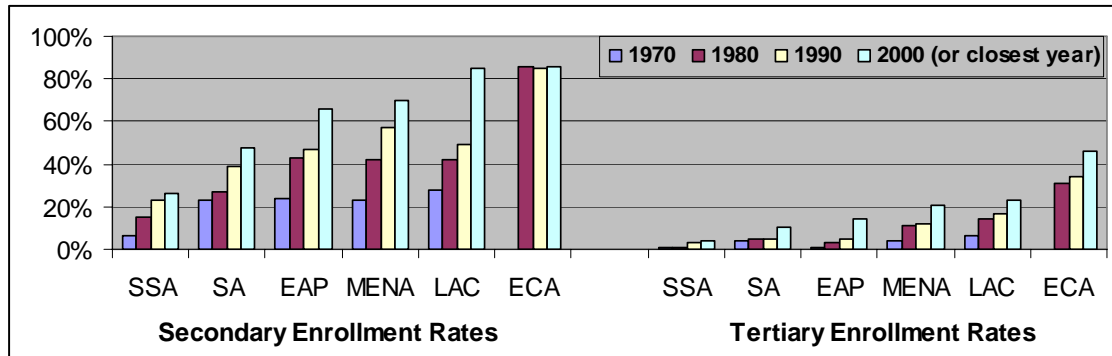


Source: WDI (2003)

Most regions of the world, including MENA, have near universal primary school enrollment rates. The exception is SSA where gross primary school enrollment rates were only 82 percent in 2000. The MENA region had secondary enrollment rates of 70 percent in 2000, higher than SSA, SA, and EAP, but lower than LAC (85 percent). MENA had tertiary enrollment rates of 21 percent, again ahead of SSA, SA, EAP, but behind LAC (Figure 3.16).



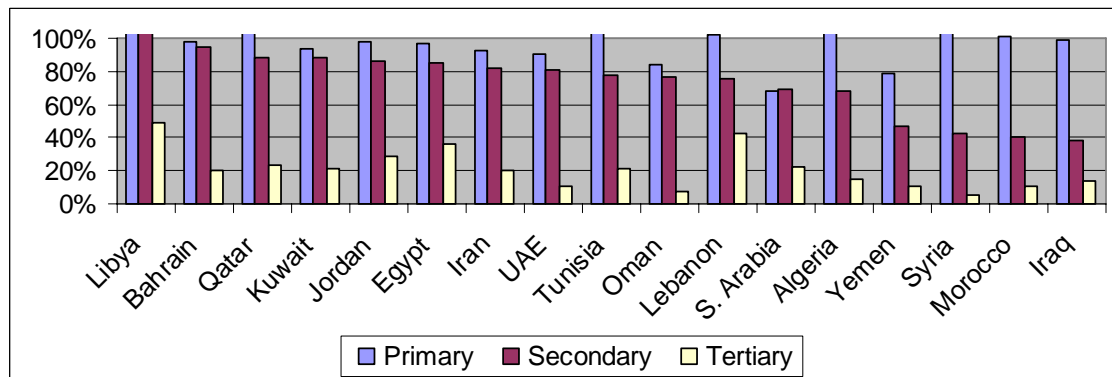
**Figure 3.16 Gross Enrollment Rates, by Educational Level (1970 - 2000 or closest year)**



Source: WDI (2004)

Nearly half of all MENA countries have achieved near universal primary school enrollment and most have enrollment rates of over 80 percent (Figure 3.17). The exceptions are Saudi Arabia and Yemen, with primary school enrollment rates of 68 percent and 79 percent, respectively. Secondary school enrolment rates are above 70 percent in most MENA countries. However, a number of countries have secondary school enrollments rates of less than 50 percent, including Yemen (46 percent), Syria (42 percent), Morocco (38 percent), and Iraq (38 percent). The situation in Syria and Iraq are especially noteworthy. They are the only two countries in the region to experience declines in gross secondary school enrolment rates between 1980 and 2000 (WDI, 2004).

**Figure 3.17 Gross Enrollment Rates, by Educational Level (2000 or closest year)**



Source: WDI (2004)

Increases in school enrollment rates across the region have coincided with declines in quality as public education systems faced tightening budgets. MENA countries have failed to maintain standards for teaching staff, infrastructure has deteriorated, and curricula in many countries are obsolete (World Bank, 2002; Dessus, 2001). There is some evidence that education systems are failing to equip students with

skills that are valued by the private sector and the global economy (World Bank, 2004; Murphy & Salehi-Isfahani, 2003). Mismatches between employer needs and the knowledge and skills of recent graduates can affect the employment prospects of the inexperienced but relatively well-educated MENA youth.

International evidence suggests that higher educational attainment is associated with positive labor market outcomes for individuals, including higher wages and better job opportunities. The individual (private) returns to an additional year of schooling, in terms of higher wages, have been estimated at between 8 and 15 percent (Card, 1999; Card, 2001; Pritchett, 1999). In MENA, estimates of private returns to education, based on different data and methodologies, range between 4 and 50 percent, (Table 3.6). Using a common estimation method during a common period (1990s), World Bank (2004) finds returns to education between 5 and 15 percent, depending on the country and level of schooling. While females tend to earn lower wages than males, the differences tend to diminish with educational attainment. As a result, private returns to education tend to be higher for females than for males (Dah and Hammami, 2000; World Bank, 2004).

**Table 3.6 Estimates of Returns to Education from Various Studies**

Study	Country	Date	Data	Estimates
Assaad (1997)	Egypt	1988	1988 Labor Force Survey	Elementary: 5% Secondary: 8% Technical: 8% University: 11% Postgraduate: 12%
Dah & Hammami (2000)	Lebanon	1999	Author-initiated cross-sectional survey of 6,625 individuals in Greater Beirut area.	Elementary: 5.6% Secondary: 2.6% Vocational: 8.3% University (B): 4.9% University (M): 14.2%
Psacharopoulos (1994)	Somalia	1983		Elementary: 59.9% Secondary: 13% University: 33.2%
Psacharopoulos (1994)	Yemen	1985		Elementary: 10% Secondary: 41% University: 56%
Psacharopoulos (1994)	Tunisia	1980		Secondary: 13% University: 27%

In most developing regions, private returns to education tend to be higher for primary education than for secondary and university education. In MENA, returns to education seem to increase with the level of schooling (Psacharopoulos and Patrinos,

2002). One explanation is that public employment plays a more important role in MENA than in other developing regions (World Bank, 2004; Boudarbat, 2004). Higher returns to education for secondary and university graduates may reflect government pay scales rather than improved productivity (Pritchett, 1999; Glewwe, 2002). This hypothesis, however, should be tempered in light of empirical evidence from Egypt, Morocco and Jordan, which finds higher returns to education in the public sector for all levels of education *except* the university level (World Bank, 2004).

While research has established a positive link between education and wages, the link between education and employment is not as well studied. For nearly all MENA countries with available data, unemployment rates are lowest among individuals with the lowest *and* the highest levels of educational attainment (Table 3.7). In GCC countries, the highest unemployment rates are concentrated among secondary school graduates. In non-GCC countries, the highest unemployment rates are concentrated among those with mid-levels of educational attainment. One exception is Morocco, where unemployment rates increase with the level of education and are highest among university graduates. For Morocco, Boudarbat (2004) suggests that educated youth prefer to wait for jobs in the formal and public sectors, which offer much higher wages and more generous non-wage benefits. Other exceptions are Tunisia, Iran and, to a lesser extent, the West Bank and Gaza, where unemployment rates decline with educational attainment.

**Table 3.7 Unemployment Rates by Educational Attainment**

	Year	Illiterate / Basic Literacy	Primary	Intermediate	Secondary	Vocational	University
<b>GCC</b>							
Qatar	1997	1.2	3.3	2.3	4.3	2.0	3.5
UAE	1995	1.3	1.6	1.7	2.5	1.8	2.3
S. Arabia	2002	1.3	7.2	5.5	8.9	6.4	5.9
Oman	1996	4.2	12.9	7.4	18.6	4.5	0.9
Kuwait	1995	0.6		7.3		2.9	1.1
<b>Non-GCC</b>							
Morocco	2003	2.6	11.2	21.7		24.0	30.3
Tunisia	1994	13.8	15.7		12.7		3.8
Iran	1996	8.7	7.4		6.0		4.0
Syria	2002	6.0	14.7	12.2	14.6	11.3	6.2
Algeria	1995	11.6	29.5	48.9	37.4		23.3
Jordan	1996	3.7	11.9	21.6	11.0	18.2	10.4
Yemen	1999	3.0		4.8	6.9	10.9	6.6
WB Gaza	2002	32.1	37.5	36.6	29.8	19.6	17.8

Source: LABORSTA (2003), Bahrain CIO (2002), Saudi CDS (2003).

Note: a number between columns indicates that the estimate is for both education categories as a group.

Social returns to education may exceed the private returns. Using data for the United States, Moretti (2002) finds that a one percentage-point increase in the supply of college graduates raises the wages of high-school dropouts by 1.9 percent, of high school graduates by 1.6 percent, and of college graduates by 0.4 percent. In MENA, there is a macroeconomic puzzle. Despite positive private returns to education, regional increases in educational attainment have not been accompanied by higher growth rates in output per capita or real wages. Most of the economic growth has been due to factor accumulation rather than increases in factor productivity (Pritchett, 1999; Makdisi et al., 2001). Findings from other developing regions have been mixed, with some evidence that educational attainment increases productivity and promotes economic growth (Sianesi and Reenen, 2002).

There are a number of possible explanations for this puzzle. Pritchett (1999) suggests that MENA governments provided high wages and benefits to graduates without these workers necessarily contributing to higher productivity. Dessus (2001) suggests that large school enrollments have reduced the quality of the education provided. Murphy and Salehi-Isfahani (2003) suggest that the rigid, non-transparent labor markets of the region value easily-measurable credentials acquired through rote memorization and formal schooling to more productive (but less quantifiable) softer skills such as creativity and team-work. A combination of these factors could probably explain the high education – low growth situation in MENA. However, it is not clear which factors play a greater role.

Research on the MENA region to date has mostly focused on the link between education and *economic growth*. Less attention has been paid to the link between education and employment and wages. This is an important area for future research.

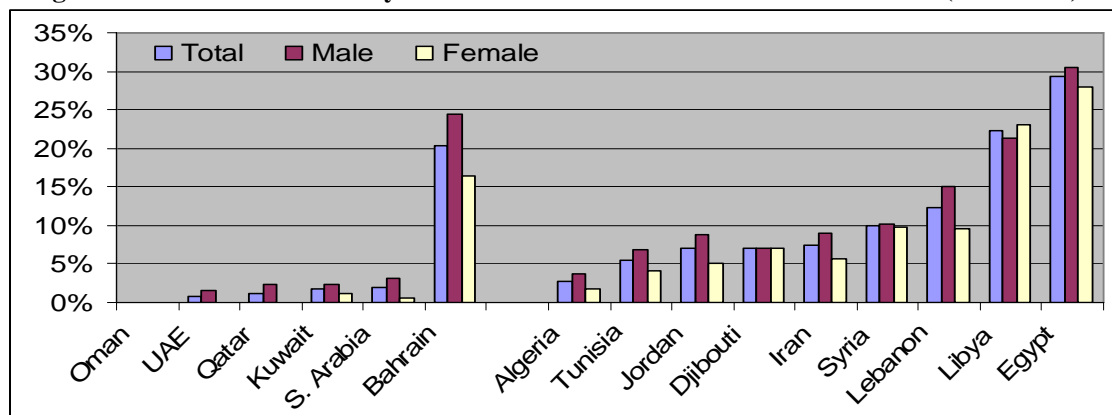
### ***Vocational Education and Training Programs***

Vocational education and training (VET) programs are meant to provide a structured link between school and the labor market, by imparting youth with skills that can readily be applied after leaving school. These programs are typically part of the formal school structure, administered by government agencies dealing with education (ministries of education or higher education), and are appropriately classified as vocational secondary or technical post-secondary programs. Many countries also offer “second-chance” programs which youth and adults who left school can participate in to obtain specific occupational skills needed in the labor market. These programs are often

administered by government labor agencies and are considered part of active labor market programs, which we will discuss below.

The use of vocational education appears to be mixed across MENA countries. General (non-technical) secondary education is the norm and, in most MENA countries, less than 10 percent of secondary students receive vocational or technical training (Figure 3.7). The exceptions are Syria, Lebanon, Bahrain, Libya, and Egypt where 10 percent or more of secondary school students are enrolled in vocational programs. However, there is evidence that these figures underreport the real extent of vocation training (Bennell, 1999).

**Figure 3.18 Share of Secondary Students in Vocational / Technical Education (2001/2002)**



Source: United Nations Educational, Scientific & Cultural Organization (UNESCO, 2004)

The evidence on the effectiveness of vocational education is mixed and depends on whether students are provided with skills that are in demand in the labor market. In MENA, vocational systems appear to be expanding with incomplete information about market needs, no coherent national strategy, and weak linkages with the private sector (World Bank, 2002). Some MENA countries have tried improving the employment prospects of VET students by introducing “dual-system” programs that combine training and apprenticeships, often through joint public-private programs. Egypt began experimenting with dual-system programs during the 1990s (Brewer, 2004). Some MENA countries have begun their own programs in recent years. Recent evidence also suggests that other types of school-to-work programs, such as school enterprises and internships, encourage both participation in higher education and employment (Neumark and Rothstein, 2003).

#### **4. LABOR DEMAND FACTORS AFFECTING YOUTH EMPLOYMENT**

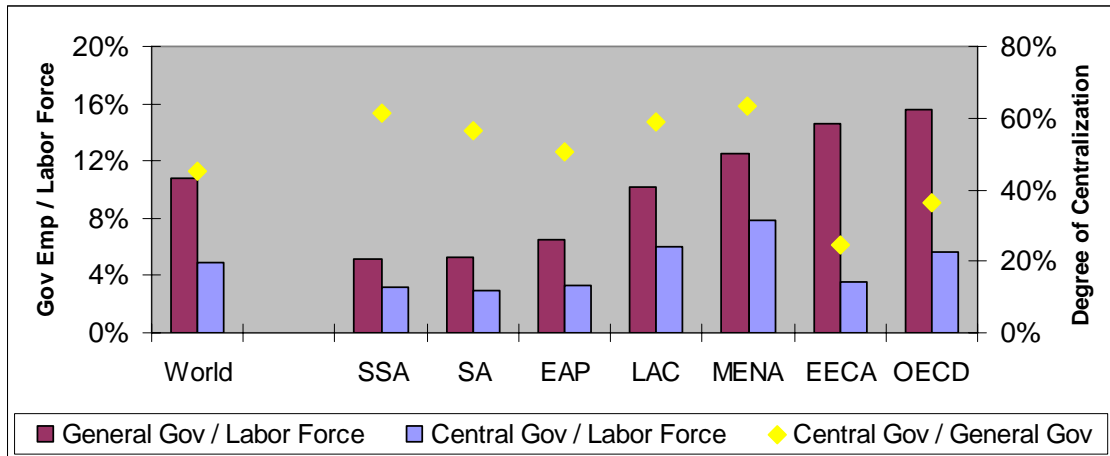
Labor supply pressures are only part of the story behind the high rates unemployment and joblessness among MENA youth. Youth employment outcomes are also affected by labor demand factors and labor market institutions. There are less data available on labor demand factors in the region and much of this data is dated. The analysis in the following two sections, therefore, will be more limited than our previous discussion of labor supply.

##### **4.1 Labor Demand in the Public Sector**

Several strands of the discussion so far point towards the public sector as a main culprit behind high unemployment rates, at least in some MENA countries. Governments do need workers to administer their policies and programs and to engage in the production of public goods and services. To the extent that public programs are run efficiently and provide services that meet a public need, this employment is productive. Indeed, MENA governments invested heavily in social services during the 1960s and 1970s, leading to large improvements in human development. However, over the past two decades, public employment in some countries has become a welfare system for workers who could not find jobs in the private sector at comparable wages. World Bank (2004) suggests that public sector employment in MENA is part of a *social contract* in which governments guaranteed young educated workers access to permanent jobs with high wages and benefits.

The numbers tend to support this hypothesis. During the early 1990s, civilian government employment accounts for 11 percent of employment worldwide, compared to 12.5 in MENA – the highest average among developing regions (Figure 4.1). Central government employment accounted for 5 percent of employment worldwide, compared to 8 percent in MENA – the highest in the entire world. In addition, MENA had the highest degree of centralization of government employment in any region, with 63 percent of government workers in central government.

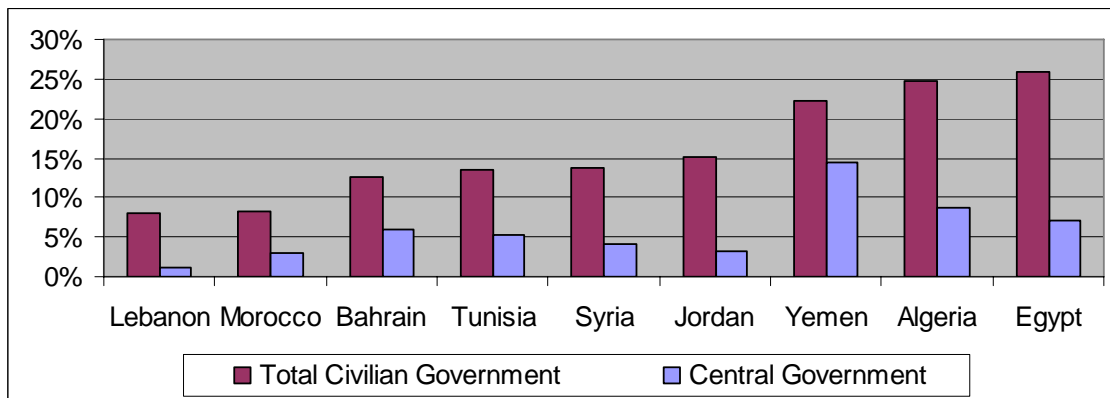
**Figure 4.1 Size of Public Sector / Total Employment & Centralization (early 1990s)**



Source: Schiavo-Campo, de Tommaso and Mukherjee (1997)

The proportion of public sector employment differed markedly across MENA countries (Figure 4.2). Egypt had the highest civilian government employment, with over 25 percent of the workforce involved in government administration and the provision of public social services (like health and education), followed by Algeria (24.8 percent) and Yemen (17.5 percent). By comparison, civilian government employment in Lebanon and Morocco were under 10 percent of total employment.

**Figure 4.2 Size of Public Sector / Total Employment (early 1990s)**

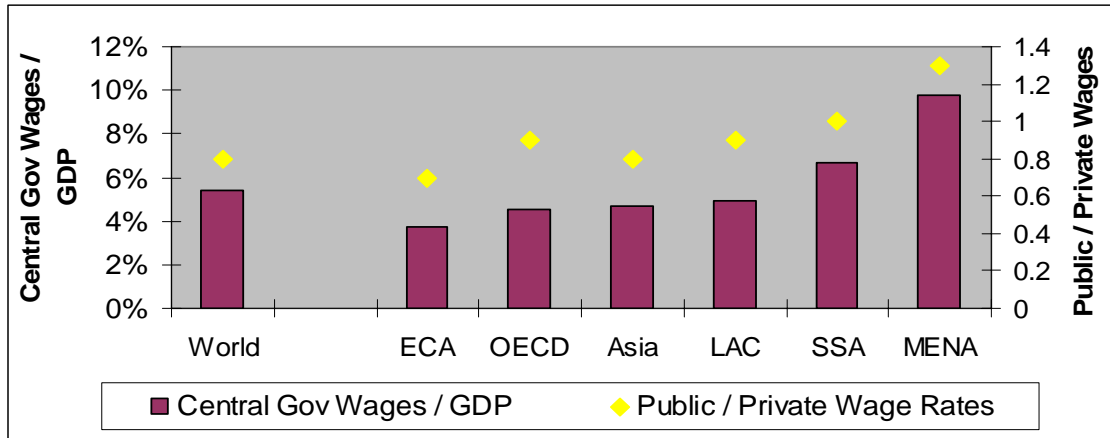


Source: Abrahart, Kaur and Tzannatos (2002)

The MENA region also has the highest central government wage bill in the world (as a percentage of GDP), 9.8 percent of GDP compared to a global average of 5.4 percent (Figure 4.3). The high wage bill partly reflects that fact that government employment in MENA is comparatively high, but it also reflects the fact that public sector wages in MENA were on average 30 percent higher than private sector wages,

compared to 20 percent *lower* worldwide. In all other regions of the world, public sector wages are either on par with or below private sector wages (Schiavo-Campo et al, 1997).

**Figure 4.3 Government Wage Bill / GDP & Public / Private Sector Wages (early 1990s)**



Source: Schiavo-Campo, de Tommaso and Mukherjee (1997)

Relatively high wages and benefits encourage workers to seek jobs in the public sector instead of potentially more productive jobs in the private sector. Also, generous childcare and maternity leave policies encourage females to focus on obtaining public sector jobs. Fiscal constraints facing MENA governments since the 1980s have restricted the growth in public sector employment, increasing the wait times for public sector jobs. Public sector wages are also facing downward pressure in many countries. However, public sector jobs remain valued because of job security, high compensation and benefits, and lack of opportunities in the private sector. It appears that the system essentially has created a dual labor market with the public sector representing the high-wage high-benefit sector.

There is little empirical work to confirm that public sector employment has contributed to high youth unemployment and joblessness rates in the MENA region. However, there is some country-specific evidence. Boudarbat (2004) finds that unemployment durations are far longer for Moroccan university graduates who indicated that they prefer jobs in the public sector, which offer better job security and initial wages



that were 42.5 percent higher than those in the private sector<sup>6</sup>. Indeed, more than half of unemployed workers holding a university degree desired employment *exclusively* in the public sector. The willingness of educated workers to wait for job openings in the public sector pushed the unemployment rate of workers with high school and above to over 30 percent, compared to an overall unemployment rate of 12 percent. Assaad (1997) finds that, in Egypt, government employment guarantees for graduates and attractive public sector compensation policies encouraged queuing for government jobs, and contributed to high graduate unemployment rates, even in the face of wage erosion in the public sector. He notes that government pay scales especially benefited female secondary school graduates, as they appeared to face discrimination in the private sector.

#### **4.2 Labor Demand in the Private Formal and Informal Sectors**

The public sector model that prevailed in the MENA region during the second half of the twentieth century impeded the development of a dynamic private sector that could generate the levels of sustained economic growth needed to reduce youth unemployment in the region (World Bank, 2004). Highly regulated economies and an unsupportive business environment adversely affected job creation and growth (Abed and Davoodi, 2003). According World Bank surveys, MENA economies suffer from several constraints that discourage entrepreneurship and firm creation, including barriers to entry, high transaction costs, and difficulties in securing finance for start-ups. The cost of complying with official requirements to set up new businesses, as a percentage of Gross National Income (GNI), is 6.4 times higher than in OECD countries and 3.3 times higher than in Europe and Central Asia (EAC). Firms in the MENA region must deposit, on average, 856 percent of per capita GNI in a bank in order to obtain a business registration number. This is the highest in the world – 3.4 times higher than Sub-Saharan Africa, 8.5 times higher than East Asia, and 30 times higher than in Latin American and the Caribbean (World Bank, 2004c).

The overall condition of the business environment is not quite so bleak. The MENA region ranks better than Sub-Saharan Africa and marginally better than Latin America and the Caribbean, but worse than other developing regions, in terms of the overall business environment (World Bank, 2004b). The region appears to be especially

---

<sup>6</sup> This gap narrows over time. Wages rise 11.5 percent per year of experience in the private sector compared to 6 percent in the public sector in Morocco.

vulnerable in the area of enforcing contracts, where it ranks evenly alongside Latin America and Sub-Saharan Africa as having the worst averages in the world (Table 4.1). In addition, female workers face significant barriers to entry in the private sector, often contributing to high female unemployment rates and large gender gaps in wages (World Bank, 2004b).

**Table 4.1 Selected Business Environment Indicators, by Region**

	OECD	EAP	ECA	SA	MENA	LAC	SSA
<b>Starting a Business</b>							
Number of Procedures	6	8	9	9	10	11	11
Duration (days)	25	52	42	46	39	70	63
Cost (% GNI per capita)	8	48	16	45	51	60	225
Min. Capital (% GNI per capita)	44	101	52	0	856	29	254
<b>Hiring and Firing Workers</b>							
Difficulty of Hiring Index	26	20	31	37	22	44	53
Rigidity of Hours Index	50	30	51	36	52	53	64
Difficulty of Firing Index	26	22	42	53	40	34	50
Rigidity of Employment Index	34	24	41	42	38	44	56
Firing Costs (weeks)	40	52	38	84	74	70	59
<b>Registering Property</b>							
Number of Procedures	4	4	6	5	6	6	6
Time (days)	34	51	133	55	54	56	114
Cost (% property per capita)	4.8	4.2	3	6.1	6.8	5.6	13.1
<b>Protecting Investors</b>							
Disclosure Index	5.6	3.9	3.6	3.2	2.6	2.3	2.1
<b>Enforcing Contracts</b>							
Number of Procedures	19	27	29	29	38	35	35
Time (days)	229	325	412	375	437	462	434
Cost (% of debt)	11	88	18	40	18	23	43
<b>Closing a Business</b>							
Time (years)	1.6	3.4	3.3	5.1	3.8	3.6	3.5
Cost (% of estate)	6.8	29.8	13.1	8.3	13	15.8	20.5
Recovery Rate (cents / dollar)	72	30	31	21	29	27	17
<b>Average Ranking - All Variables</b>	<b>1.6</b>	<b>2.9</b>	<b>3.2</b>	<b>4.3</b>	<b>4.5</b>	<b>4.8</b>	<b>5.9</b>

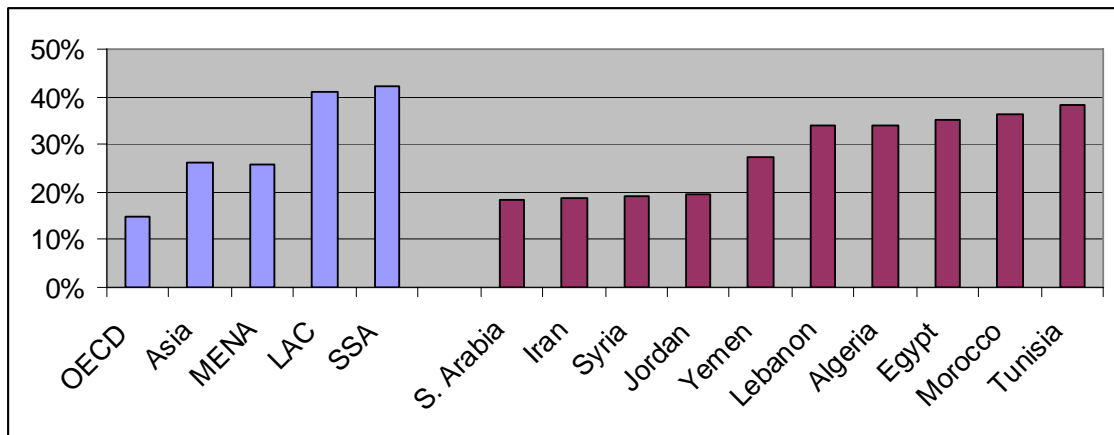
*Source: World Bank Doing Business Database (2004)*

In addition, Egypt experienced a reduction in share of females in the paid labor force in the private sector following a structural adjustment program (Assaad, 2002). This pattern holds for other MENA countries, with the exception of Morocco, Tunisia, and Turkey. The reason appears to be weakening demand in sectors that have traditionally hired females, including export-oriented manufacturing. Furthermore, in

several occupations female participation rates actually declined (Assaad, 2002; Assaad and Arntz, 2005).

The informal sector in MENA is picking up part of the employment slack from the public and formal private sectors. The size of the informal sector in MENA, estimated at 25 percent of GNP, is similar to the world average (Figure 4.4), but has been expanding as a result of the lack of employment opportunities in the formal sector. The share of new entrants whose first jobs were in the informal sector increased from less than 20 percent in the 1970s to 60 percent in the 1990s (World Bank, 2004). In Morocco, about one-half of all jobs created between 1985 and 1993 were in the informal sector. Employment in the informal sector is highest among workers with an intermediate education level – those with the lowest eligibility in the public sector and the highest unemployment rates in the region (Table 3.7). The combination of a high-wage restricted public sector, a growing low-wage but flexible informal sector, and a medium-wage highly-regulated formal private sector suggest favorable conditions for high levels of search and wait unemployment, especially among new labor market entrants.

**Figure 4.4 Size of the Informal Economy / GNP (1999/2000)**



Source: Schneider (2002). MENA countries: Algeria, Egypt, Morocco, Tunisia, Iran, Jordan, Lebanon, Saudi Arabia, Syria, and Yemen.

## 5. LABOR MARKET INSTITUTIONS

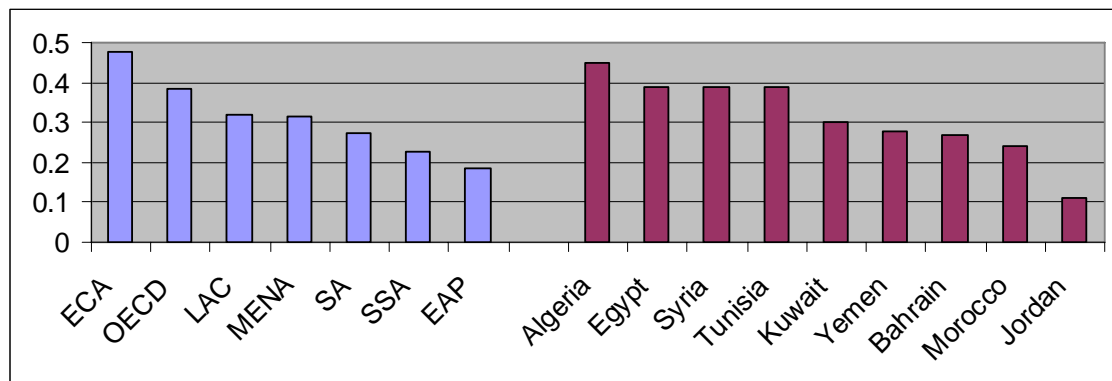
In the previous section we discussed how MENA governments can affect the labor market through their size and wage-setting practices. In this section, we consider the regulatory role of the state and other labor market institutions. We have noted that many

of the labor supply and demand factors introduced above may have stronger disemployment effects in the presence of labor market rigidities.

### 5.1 Labor Market Rigidity

According to a labor market rigidity index developed by Forteza and Rama (2001), labor market institutions in MENA are among the most ridged in the developing world (Figure 5.1). The index includes relative minimum wages, mandated maternity benefits, union membership, and share of government employment. MENA’s score is troubling in light of the region’s labor supply pressures. However, its high score is mostly due to the size of government employment. Other labor market features are not as rigid. In addition, there is much variation across MENA countries, with Algeria, Egypt, Syria, and Tunisia contributing the most to MENA’s high score (Figure 5.1).

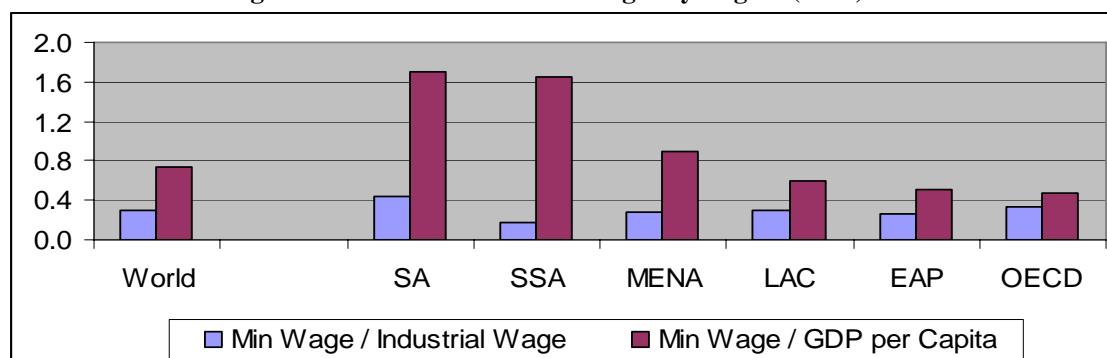
**Figure 5.1 Labor Market Rigidity Indicators (2000)**



*Source: Forteza & Rama (2001). The rigidity index includes minimum wages, mandated benefits, union membership, and share of government employment.*

Minimum wages in MENA, as a proportion average industrial wages, tend to be fairly low (around 30 percent). However, most MENA workers do not work in industry. When compared to GDP per capita, minimum wages are mid-range among developing regions (around 90 percent). While not as high as minimum wages in Sub-Saharan Africa or South Asia (Figure 5.2), this level of minimum wage can potentially dampen competitiveness and result in lower employment levels.

**Figure 5.2 Relative Minimum Wages by Region (2000)**



Source: Forteza and Rama (2001). MENA countries covered: Algeria, Bahrain, Egypt, Jordan, Kuwait, Morocco, Syria, Tunisia, and Yemen.

Most non-GCC countries have a minimum wage (Table 5.1), with the highest in Morocco and Lebanon at over \$200 per month, and the lowest in Egypt at \$34 per month. Some non-GCC countries administer complex minimum wage systems with levels that differ by sector, occupation, and location (in Table 5.1 we only report the basic minimum wage for low-skill workers). GCC countries do not have minimum wages in the private sector. Bahrain and Oman have minimum wage “guidelines”, which are not enforced and which few unskilled workers earn. Kuwait has a public sector minimum wage, with the minimum for nationals at \$771 per month and the minimum wage for expatriates at \$306 per month.

**Table 5.1 Monthly Minimum Wages in the Private Sector**

	Local Currency	US Dollars	Enforcement
<b>GCC</b>			
Bahrain	150	398	unenforced guideline
Oman	120	312	unenforced guideline
Kuwait	none	none	n/a
Qatar	none	none	n/a
S. Arabia	none	none	n/a
UAE	none	none	n/a
<b>Non-GCC</b>			
Morocco	2,010	223	not in informal sector
Lebanon	300,000	200	not enforced effectively
Tunisia	189	151	not in informal sector
Jordan	85	121	mostly enforced
Iran	122,000	120	appears to be enforced
Algeria	8,000	105	Inconsistent enforcement
Iraq	130,000	91	no information
Syria	3,500	70	not in informal sector
Egypt	116	34	in large companies only
Libya	none	none	n/a
WB Gaza	none	none	n/a
Yemen	none	none	n/a

Sources: ILO (2004), U.S. Department of State (2002), news, and personal communication.

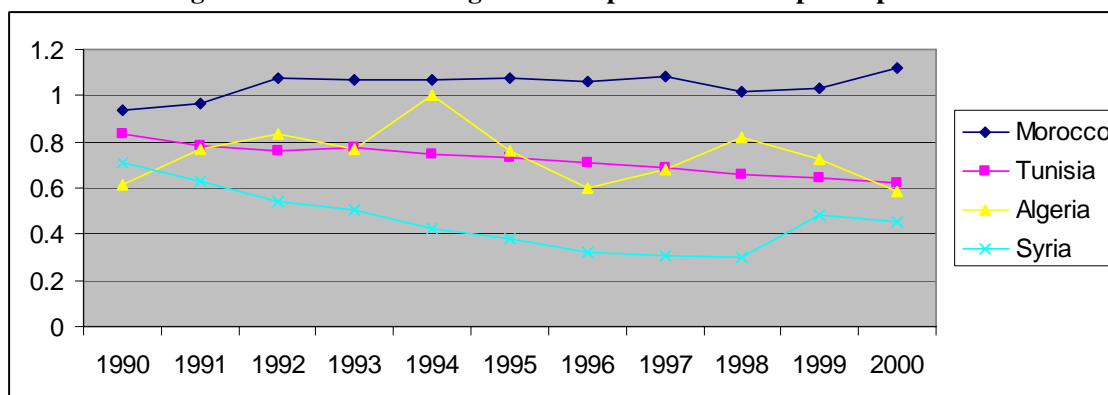
There is an ongoing debate in industrialized countries about the employment effects of minimum wage legislation, especially on the labor market for youth. For nearly half a century, there was a consensus among economists a 10 percent increase in the minimum wage reduced teenage employment rates by 1-3 percent (Brown et al., 1982). During the 1990s, however, several studies found near-zero (and even positive) associations between higher minimum wages and employment (Card and Krueger, 1995). Economic theories of monopsony and efficiency wages have been used to explain these positive associations. The subsequent debate left some doubt about the true size (and direction) of the employment effects of minimum wages (Neumark and Wascher, 1992). In industrialized countries, the evidence suggests that minimum wages do have a small negative effect on youth employment. However, these effects show considerable variation across countries, with some studies showing no significant effects (Ghellab, 1998). Neumark and Wascher (2004) find that the disemployment effects are smaller in countries that have sub-minimum wage provisions for youth. They also find that the disemployment effects of minimum wages appear to be strongest in the countries with *less* regulated labor markets.

In developing countries, research on the employment effects of minimum wages is limited because the value of the minimum wage is often too low to have much of an effect, compliance is typically a problem, and data are not always available (Ghellab, 1998). The existing evidence suggests a weak negative impact on employment in some cases and no significant impact in others (O'Higgins, 2003; Ghellab, 1998). Using data from Chile, Montenegro and Pagés (2003) find that a 10 percent increase in the minimum wage reduces employment rates for youth by around 0.5 percentage points. Evidence from Mexico and Colombia suggest negative employment effects when minimum wages are close to mean wages, but no effect when they are too low to be binding in the formal sector (Bell, 1995). For Indonesia, Rama (1996) found that doubling the minimum wage led to a 2 percent decrease in wage employment, with effects concentrated among small firms. Similar findings were obtained by Alatas and Cameron (2003). Maloney and Mendez, (2003) argue that the effects of minimum wages in developing economies may be magnified throughout the labor market, both by influencing the wage distribution and by acting as a signal to the informal sector about where to set wage rates. They find evidence for these effects in Latin America.

We are not aware of any published research on the employment effects of minimum wages in MENA countries. Using *simulation* techniques, Agénor and El Aynaoui (2003) suggest that, for Morocco, a 5 percent cut in the urban minimum wage would reduce unskilled unemployment in the short run by about 2.4 percent. However, this estimate seems high given the evidence that minimum wage laws in Morocco appear to be weakly enforced (Currie and Harrison, 1997). Also, the research literature suggests that disemployment effects are weaker in more rigid labor markets (Neumark and Wascher, 2004), which is a general characterization of labor markets in the MENA region (Forteza and Rama, 2001).

Minimum wages might help explain part of the large gender differences in employment outcomes in MENA – partly because females tend to work in lower paying jobs. Myatt and Murrell (1990) find that the minimum wage is the most important determinant of gender unemployment differentials in Canada during the 1980s. However, there is evidence that minimum wage laws are not rigorously applied in many MENA countries (Table 5.1). For four MENA countries with available ILO data between 1990 and 2000, the largest decline in the relative value of the minimum wage occurred in Syria, from 71 percent of GDP per capita in 1990 to 45 percent in 2000 (Figure 5.3). If the minimum wage were affecting gender differences in unemployment rates, we would have expected gender differences in Syria to have declined during this time. Instead, they increased dramatically, rising from a difference of 4.4 percentage points (a ratio of 1.9) in 1989 to 15.9 percentage points (a ratio of 3.0) in 2001 (LABORSTA, 2004).

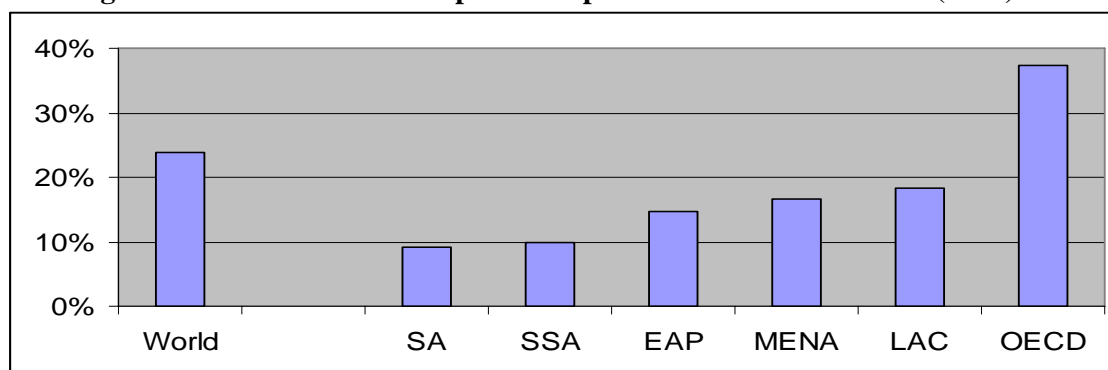
**Figure 5.3: Minimum Wages as a Proportion of GDP per Capita**



Source: ILO (2003b)

A large portion of the labor force in MENA countries has become eligible for various degrees of social benefits and support services, and in many countries strong unions have evolved to protect the interests of employees, especially those in public sector enterprises. These unions and associations have expanded over time to include industrial and other urban workers (World Bank, 2002). Among developing regions, the level of unionization in MENA is second only to Latin America and the Caribbean (Figure 5.4).

**Figure 5.4: Union Membership as a Proportion of the Labor Force (2000)**



Source: Forteza and Rama (2001). MENA countries covered: Algeria, Bahrain, Egypt, Jordan, Kuwait, Morocco, Syria, Tunisia, and Yemen.

There are significant differences across MENA countries in terms of the legal status of unions and restrictions on their activities (Table 5.2). Some countries allow collective bargaining with few restrictions. Others allow unions but place restrictions. Most GCC countries do not allow collective bargaining. Although several allow labor input in decision-making through joint labor-management committees or professional associations.

**Table 5.2 Status of Collective Bargaining across MENA Countries**

Allowed in Law & in Practice	Allowed with Restrictions	Not Allowed by Law
Algeria	Egypt	Bahrain*
Jordan	Kuwait	Iran
Lebanon	Libya	Oman*
Morocco	Qatar	Saudi Arabia
Tunisia	Syria	UAE*
WB & Gaza	Yemen	

Sources: ILO (2004), U.S. Department of State (2002), news & personal communication.

\* Some labor input allowed through joint labor-management committees or professional associations.

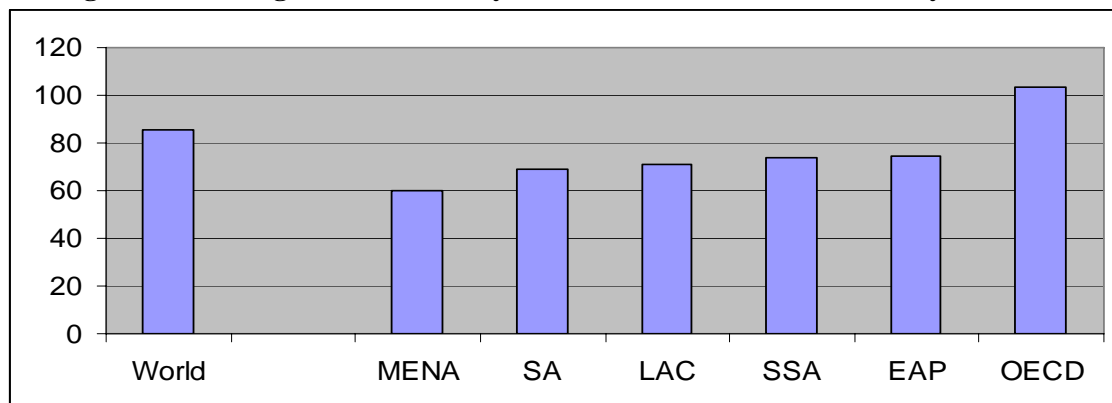


Unions have been associated with slightly higher unemployment rates for females and youth (Bertola et al., 2002; Montgomery, 1989). In developing countries, they have been associated with positive effects on the employment of unskilled workers and crowding out of skilled workers (Maloney and Riberio, 1999). In most cases, estimated disemployment effects of unions on young job seekers have tended to be small. There are no empirical estimates for the MENA region, however Agénor et al. (2004), through *simulation* methods, suggest negative employment effects among skilled workers.

Not all aspects of the MENA labor market are rigid. The average number of days of maternity leave with full pay is lower in MENA than in any other region of the world – 60 days in MENA compared with 69 days in the next-closest region, South Asia (Figure 5.5). Weak support for working mothers may be a contributing factor to the low labor force participation rates among females in MENA. Weak maternal support may also help to explain the high rates of unemployment among female youth, in that it encourages young females to wait for job openings in the public sector where maternity benefits are higher.

Empirical evidence from developing countries suggests that some protective measures, such as restricting nighttime work and overtime for female workers, actually reduce employment among women. Job-protected benefits, however, have been found to increase women’s attachment to the labor force (van der Meulen Rodgers, 1999). This finding suggests that the relatively small number of days of maternal leave with full pay in MENA might contribute to lower employment rates among new mothers and female youth.

**Figure 5.5 Average Number of Days of Maternal Leave with Full Pay (2000)**



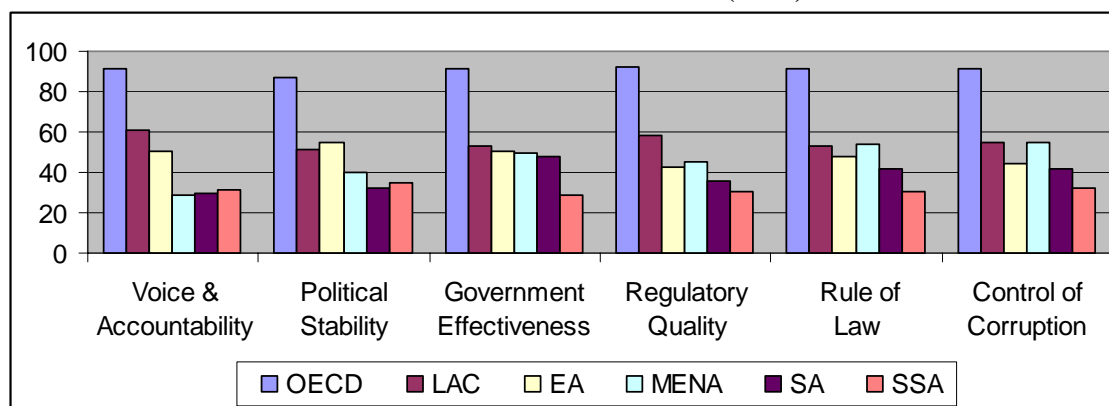
Source: Forteza and Rama (2001)

## 5.2 The Quality of Governance

There is growing evidence that the quality of governance plays an important role in promoting economic growth and productivity (Kaufmann and Kraay, 2002; Makdisi et al., 2001). The difficulty in studying governance, however, is in measuring it. Kaufmann et al. (2003) develop subjective survey-based indicators of governance covering six dimensions: (1) voice and accountability, (2) government effectiveness, (3) rule of law, (4) control of corruption, (5) political stability, and (6) regulatory quality.

Using these indicators, we observe that the MENA region ranks second to last in terms of “voice and accountability”, surpassed only by countries in the former Soviet Union. No MENA country achieved a voice and accountability ranking higher than the 50<sup>th</sup> percentile (Figure 5.2). Across the other five indicators, however, MENA generally fares better than South Asia and Sub-Saharan Africa, but worse than East Asia and Latin American. While all six indicators of governance have been found to be correlated with economic growth, voice and accountability does not stand out as being more important than the others (Kaufmann and Kraay, 2002). So while MENA’s quality of governance might be a factor in explaining the youth employment situation, it does not, on its own, suggest why unemployment rates among MENA youth are the highest in the world.

**Table 5.6: Governance Indicators (2002)**



Source: World Bank Governance Research Indicator Country Snapshot (GRICS), based on Kaufmann, Kraay, and Mastruzzi (2003)

### 5.3 Active Labor Market Programs

Active labor market programs include training programs for unemployed or displaced workers, job search assistance, support for entrepreneurial activities, public employment (works) projects, and wage subsidies. Some programs also offer transportation assistance, childcare assistance, and other services aimed at supporting work. In a survey of more than 100 active labor market programs in OECD countries, Dar and Tzannatos (1999) find that they only marginally mitigate structural problems in the labor market and, if not designed properly, may actually make matters worse. Overall, OECD countries spent substantially more on training programs than on other types of active labor market programs, followed by employment services (such as job search assistance) and then public works.

Youth “second chance” training programs (also known as retraining programs) have been used widely in the United States and France, intermittently in England and Sweden, and hardly at all in Japan and Germany. Japan relies almost entirely on basic education and Germany relies heavily on vocational education and training through the school system (Ryan, 2001). Retraining programs are not as prevalent in developing regions, but there are several some notable programs in Latin America and Africa. In the MENA region, most training programs are associated with school-based vocational education systems, and are generally not part of the countries’ labor market programs. However, some MENA countries offer limited retraining opportunities in conjunction with other programs.

Empirical evidence from the United States suggests that training programs have a small positive impact on adult earnings and employment, but generally no significant impact on the earnings or employment of youth. Even when positive effects for youth have been found, program benefits have tended to be small and not enough to cover program costs (Friedlander et al., 1997; Greenberg et al., 2004). Many reasons for these disappointing findings have been suggested, including the quality of the training received, the incomplete mix of services offered, the limited duration of most programs, and potential stigma attached to second-chance programs. One of the few successful youth-oriented training programs in the United States has been Job Corps, a residential (live-in) program that offers intensive training, remedial education, and other support services to disadvantaged youth.

Evaluations of European training programs have generally found small positive employment effects for youth, mostly through higher employment duration spells and lower unemployment spells. However, European programs have had little (possibly even negative) effects on earnings (Ryan, 2001). Evaluations of programs in developing countries have generally not been any more favorable for youth. However, Betcherman et al. (2004) present evidence from Latin America that suggests that some training programs have had positive employment impacts on youth, when integrated with job search assistance, remedial education, and social services. Training programs appear to work best when combined with other employment services and include employer involvement. Evidence from the MENA region on the effectiveness of training programs is practically non-existent. In general, vocational systems in MENA appear to be expanding with incomplete information about market needs, no coherent national strategy, and weak linkages with the private sector. In most countries, the system is fragmented and lacks coordination (World Bank, 2002).

There is growing support for the use of job search assistance and other employment services as cost-effective methods of reducing unemployment (Katz, 1994; Dar and Gill, 1998). Studies from industrialized countries show that these services have positive effects on the earnings and employment chances of adult participants (Dar and Tzannatos, 1999). Furthermore, the results come at a low cost compared to formal training. However, job search assistance does not appear to improve the employment prospects or wages for youth (Abraham et al., 2002). Also, the positive effects for adults tend to decay over time (LaLonde, 1995), suggesting that the observed impacts may partly be the result of participants displacing other workers, implying little or no net social gain. Thus, employment services offer little social benefit when unemployment is high (Betcherman et al., 2004), which is the case in MENA countries.

Many governments also rely on public employment (works) programs as a countercyclical tool to relieve excess supply in the labor market. In addition to their counter-cyclical benefits, public employment programs may improve the productivity of unemployed workers by providing them with work experience. These employment-generating activities can be socially beneficial, if applied in response to adverse economic conditions and if their duration is limited (Forslund and Krueger, 1997). Temporarily employing workers during an economic downturn is not associated with lost productivity because the workers would not otherwise have been working. Permanent employment

programs, however, can lead to dependency and lost productivity (Dar and Tzannatos, 1999; Abrahart et al., 2002). Public works programs display the widest variation in use, with expenditures ranging from 2-5 percent of total spending on active labor market programs in the UK, US, and Canada to 40 percent in Ireland and Belgium. In many countries, employment programs are shunned because they are associated with high displacement effects (Forslund and Krueger, 1997). In MENA, the effect of public works programs on employment is not known because of the absence of reliable data. In general, the programs are not considered successful in terms of improved productivity or the economic value of assets created (Tzannatos, 2002).

## 6. CONCLUSIONS

Unemployment rates among MENA youth are the highest in the world, estimated at over 25 percent in 2001, compared to 21 percent in the next closest region (SSA) and 7.8 percent among MENA adults. Youth unemployment rates vary considerably across MENA countries, ranging from 6 percent in UAE (1995) to 43 percent in the West Bank & Gaza (2002) and 53 percent in Algeria (2001). Youth unemployment is also a problem among GCC *nationals*, reaching 37 percent in Saudi Arabia (2002) and 38 percent in Bahrain (2001). In a majority of MENA countries, the share of youth among the unemployed population is over 50 percent. Unemployment is less common among mid-career adults. For this reason, high unemployment rates in MENA do not immediately translate into a problem of poverty.

High unemployment among MENA youth is accompanied by the lowest labor force participation rates in the world, for both males and females. Labor force participation rates for females are also low *relative* to those of young males. Other gender differences are also evident. Unemployment rates among female youth in MENA were estimated at nearly 32 percent in 2001, 9 percentage points higher than for male youth. By comparison, worldwide unemployment rates for female youth were 0.3 percentage points *lower* than for males.

While we do not test for causality empirically in this paper, our analysis and review of the data and research literature point to several regional factors that may be contributing to high rates of unemployment and joblessness among MENA youth: strong labor supply pressures, rising female labor force participation rates, and labor market rigidities that may be interacting with these two factors. In addition, each country may be

facing unique circumstances that might contribute to the labor market situation for youth in that country. For example, the situation in GCC countries is much different than in non-GCC countries.

High population growth rates between 1950 and 1980 contributed to high labor force growth rates, reaching 3.6 percent in the 1990s. The demographic pressures probably contributed to the high rates of youth unemployment in the region. However, the research literature suggests that a large influx of young workers does not necessarily, on its own, increase unemployment rates. The link depends on macroeconomic conditions and labor market flexibility, which were generally unfavorable in the MENA region during the 1990s. Demographic pressures in MENA are likely to ease over the coming decade. Thus, *if* suitable jobs for young workers can be found, labor supply pressures are likely to ease. At this time, policymakers should focus on increasing labor demand and reducing labor market rigidities.

A second source of labor supply pressures during the 1990s was increasing female labor force participation rates. Most research on gender differences in unemployment rates has focused on the role of aggregate economic conditions, job segregation and discrimination, but not participation trends. To the extent that males and females work in different occupations, higher rates of female entry into the labor force may lead to higher female unemployment rates that can persist over time, but which are mainly transitory in nature.

Migration from rural to urban areas may increase labor supply pressures and unemployment rates in urban areas and ease them in rural areas. International migration also may play a role, by easing labor supply pressures in non-GCC countries. For GCC countries, to the extent that expatriate workers are displacing national workers with higher reservation wages, migration may be contributing to youth unemployment in these countries. However, to the extent that expatriate workers are working in occupations where nationals do not have the requisite skills or interest to work (technical and service occupations), migrant workers may actually complement young nationals and improve their employment opportunities. GCC policies should, therefore, support complementary migrant workers while encouraging young nationals to acquire skills in technical occupations with adequate labor demand.

Substantial improvements in educational attainment across MENA have not fully translated into better employment outcomes. On the one hand, a narrowing gender gap in

educational attainment has coincided with a narrowing gap in labor force participation. On the other hand, unemployment rates remain high, especially for females. Previous research suggests that increases in school enrollment rates in MENA have led to tighter budgets and declines in educational quality. Also, vocational education has been relegated to secondary status (although this is changing) with weak linkages with the private sector and without adequate labor market information systems to ensure that students are provided with skills in demand. For nearly all MENA countries, unemployment rates were highest among individuals with intermediate levels of educational attainment and lowest among individuals with the lowest *and* the highest levels of educational attainment.

One possible reason why investments in education have not led to better aggregate employment outcomes is that high wages and benefits in the public sector may have encouraged wait and search times among new labor market entrants. Indeed, the share of civilian government employment among total employment in MENA is the highest in developing world. Furthermore, wages in the public sector in MENA were 30 percent higher than private sector wages, compared to 20 percent lower worldwide, making public sector jobs more attractive. While wages in the public sector are facing downward pressure in many countries, public sector jobs remain valued because of job security, high benefits, and lack of opportunities in the private sector.

In many MENA countries, the private sector has been severely regulated, restricting its growth and development. The business environment suffers several constraints that discourage entrepreneurship and firm creation, including high transaction costs, difficulties in securing finance, and weaknesses in enforcing contracts. The informal sector is picking up part of the employment slack and is attracting an increasing share of new entrants. The combination of a high-wage restricted public sector, a growing low-wage but flexible informal sector, and a medium-wage highly-regulated formal private sector suggest favorable conditions for high levels of search and wait unemployment, especially among new labor market entrants. However, there is little empirical work to directly support this hypothesis.

Other aspects of labor market rigidity in MENA are not that different from other developing regions. Minimum wage levels in MENA are average; however they typically are not rigorously enforced. Among developing regions, the level of unionization in MENA is second only to LAC. Both minimum wages and unions have been associated in

the research literature with adverse employment outcomes for youth. The average number of days of maternity leave with full pay is lower in MENA than in any other region of the world, which may be a contributing factor to the low labor force participation rates among females in the region. It may also explain the high rates of unemployment among female youth, in that females may wait for job openings in the public sector where maternity benefits are higher.

Another aspect of the labor market in MENA is the weak application of active labor market programs. MENA countries do not rely much on second-chance training programs for youth. However, the research literature suggests that training programs have little or no impact on the employment chances of young participants. Stronger employment effects have been found for job search assistance and other employment services. However, the observed impacts may be the result of participants displacing other workers with little net social gain. This is especially problematic when unemployment is high, which is the case in most MENA countries. Finally, public works programs have not been considered successful in terms of improved productivity or the economic value of assets created.

In sum, labor supply pressures, public sector wage premiums, and bureaucratic obstacles to the development of private sector enterprises all appear to be important contributing factors to the youth employment situation and deserve further investigation.



## References

- Abed, George and Hamid Davoodi. 2003. *Challenges of Growth and Globalization in the Middle East and North Africa*. Washington, DC: International Monetary Fund.
- Abrahart, Alan, Iqbal Kaur and Zafiris Tzannatos. 2002. "Government Employment and Active Labor Market Policies in MENA In a Comparative International Context." in *Employment Creation & Social Protection in the Middle East and North Africa*, edited by Heba Handoussa and Zafiris Tzannatos. Cairo, Egypt: AUC Press.
- Agénor, Pierre-Richard and Karim El Aynaoui. 2003. "Labor Market Policies and Unemployment in Morocco A Quantitative Analysis." Policy Research Working Paper No. 3091, World Bank, Washington, DC.
- Agénor, Pierre-Richard, Henning Tarp Jensen, Mustapha Nabli, and Tarik Yousef. 2004. "Labor Market Reforms, Growth, and Unemployment in Labor-Exporting Countries in the Middle East and North Africa," Social Protection Working Paper 3328, World Bank, Washington, DC.
- Alatas, Vivi and Lisa Cameron. 2003. "The Impact of Minimum Wages on Employment in a Low Income Country: An Evaluation Using the Difference-in Differences Approach," Policy Research Working Paper 2985, World Bank, Washington, DC.
- Amin, Sajeda and Al-Bassusi, Nagah. 2003. "Wage Work and Marriage: Perspectives of Egyptian Working Women," Policy Research Division Working Paper No.171. New York: Population Council, 2003.
- Angrist, Joshua and Adriana Kugler. 2003. "Productive or Counter-productive? Labour Market Institutions and the Effect of Immigration on EU Natives," *The Economic Journal*, 113(June): F302–F331.
- Assaad, Ragui. 2004. "Why Did Economic Liberalization Lead to Feminization of the Labor Force in Morocco and De-feminization in Egypt?" Paper prepared for Center of Arab Women Training and Research, Mediterranean Development Forum, November 2004.
- Assaad, Ragui. 2002. "Informalization and De-feminization: Explaining the Unusual Pattern in Egypt," prepared for the Conference on: Rethinking Labor Market Informalization: Precarious Jobs, Poverty, and Social Protection Cornell University, October 18-19, 2002.
- Assaad, Ragui. 1997. "The effects of public sector hiring and compensation policies on the Egyptian labor market." *World Bank Economic Review* 11(1), pp. 85-118.
- Assaad, Ragui and Melanie Arntz. 2005. "Constrained Geographical Mobility and Gendered Labor Market Outcomes Under Structural Adjustment: Evidence from Egypt." *World Development* 33(3), pp. 431-454.

- Assaad, Ragui and Sami Zouari. 2002. "The Timing of Marriage, Fertility, and Female Labor Force Participation in Morocco." Presented at the Ninth Annual Conference of the Economic Research Forum, UAE.
- Azmat, Ghazala, Maia Güell and Alan Manning. 2004. "Gender Gaps in Unemployment Rates in OECD Countries," Working Paper, Centre for Economic Performance, London School of Economics and Political Science, London.
- Bahrain Central Informatics Organization (CIO). 2002. *Basic Results: Population, Housing, Buildings, and Establishments Census*. Manama, Bahrain.
- Barro, Robert and Jong-Wha Lee. 2000. "International Data on Educational Attainment: Updates and Implications." Center for International Development Working Paper 42. Harvard University, Boston.
- Bell, Linda. 1995. "The Impact of Minimum Wages in Mexico and Colombia," Policy Research Working Paper 1514, World Bank, Washington, DC.
- Bennell, Paul. 1999. "Learning to change: Skills development among the economically vulnerable and socially excluded in developing countries," Employment and Training Paper No. 43. Employment and Training Department, ILO, Geneva.
- Bertola, Giuseppe, Francine Blau, and Lawrence Kahn. 2002. "Labor Market Institutions and Demographic Employment Patterns," NBER Working Paper No. 9043, Cambridge, MA.
- Betcherman Gordon, Karina Olivas, and Amit Dar. 2004. "Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries". The World Bank, Social Protection Discussion Paper Series No. 0402, Washington, DC.
- Boudarbat, Brahim. 2004. "Employment Sector Choice in a Developing Labor Market." Working Paper. Department of Economics, University of British Columbia, Canada.
- Brewer, Laura. 2004. "Youth at Risk: The role of skills development in facilitating the transition to work," Skills Working Paper No. 19. International Labour Organization, Geneva.
- Brown, Charles, Curtis Gilroy, and Andrew Kohen. 1982. "The Effect of the Minimum Wage on Employment and Unemployment," *Journal of Economic Literature*, 20: 487-528.
- Card, David. 2001. "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems," *Econometrica*, 69(5), September, 2001, pp. 1127-1160.
- Card, David. 1999. "The Causal Effect of Education on Earnings," in *Handbook of Labor Economics*, Volumes 3A, ed. By Orley Ashenfelter and David Card. Amsterdam: North Holland.

- Card, D. 1990. "The Impact of the Mariel Boatlift on the Miami Labor Market." *Industrial and Labor Relations Review*, 43(2):245-257.
- Card, David and Alan Krueger. 1995. *Myth and Measurement: the New Economics of the Minimum Wage*. Princeton, NJ: Princeton University Press.
- Currie, Janet and Ann Harrison. 1997. "Sharing the Costs: The Impact of Trade Reform on Capital and Labor in Morocco," *Journal of Labor Economics*, 15(3), pp. S44-S71.
- Dah, Abdallah, and Salwa C. Hammami. 2000. "The Impact of Education on Household's Quality of Life in Urban Lebanon," presented at the Seventh Annual Conference of the Economic Research Forum, Jordan, 26-29, 2000.
- Dar, Amit, and Indermit S. Gill. 1998. "Evaluating Retraining Programs in OECD Countries: Lessons Learned." *World Bank Research Observer* 13, no. 1: 79 – 101.
- Dar, Amit and Zafiris Tzannatos. 1999. Active Labor Market Programs: A Review of the Evidence from Evaluations. World Bank, Social Protection Discussion Paper Series No. 9901, Washington, DC.
- Dessus, Sebastien. 2001. "Human Capital and Growth." The World Bank, Middle East and North Africa Working Paper Series No. 22, April 2001.
- Dhonte, Pierre, Rina Bhattacharya, and Tarik Yousef. 2001. "The New Demography of the Middle East: Implications for Growth, Employment, and Housing," in Zubair Iqbal, ed. *Macroeconomic Issues and Politics in the Middle East and North Africa*. Washington, DC: International Monetary Fund.
- Fasano, Ugo and Rishi Goyal. 2004. "Emerging Strains in GCC Labor Markets," *Topics in Middle Eastern and North African Economics: Proceedings of the Middle East Economic Association*, Volume 6 (September, 2004).
- Forteza, Alvaro and Martin Rama. 2001. "Labor Market Rigidity and the Success of Economic Reforms across more than 100 Countries," Policy Research Working Paper 2521, World Bank.
- Forslund, Anders, and Alan B. Krueger. 1997. "An Evaluation of the Swedish Active Labor Market Policy: New and Received Wisdom." In *The Welfare State in Transition: Reforming the Swedish Model*, edited by Richard Freeman, Robert Topel, and Birgitta Swedenborg, 267 – 298. Chicago, IL: University of Chicago Press.
- Friedlander, Daniel, David H. Greenberg, and Philip K. Robins. 1997. "Evaluating Government Training Programs for the Economically Disadvantaged." *Journal of Economic Literature* 35, no. 4: 1809 – 1855.
- Foote, Christopher. 2002. "Young Persons and State-Level Unemployment: The Role of the Housing Market." Working Paper, Harvard University, September 2002.

- Forteza, Alvaro and Martin Rama. 2001. "Labor Market Rigidity and the Success of Economic Reforms across more than 100 Countries," Policy Research Working Paper 2521, World Bank, Washington, DC.
- Ghellab, Youcef. 1998. "Minimum Wages and Youth Unemployment," Employment and Training Paper No. 26. Employment and Training Department, ILO, Geneva.
- Girgis, Maurice. 2002. "Would Nationals and Asians Replace Arab Workers in the GCC?" presented at the Fourth Mediterranean Development Forum, Amman Jordan, October.
- Glewwe, Paul. 2002. "Schools and Skills in Developing Countries: Education Policies and Socioeconomic Outcomes," *Journal of Economic Literature*, v. 40(2), pp. 436-482.
- Godfrey, Martin. 2003. "Youth Employment Policy in Developing Countries and Transition Countries – Prevention as well as Cure". The World Bank, Social Protection Discussion Paper Series No. 0320, October 2003.
- Greenberg, David, Charles Michalopoulos, Philip Robins. 2004. "What Happens to the Effects of Government-Funded Training Programs over Time?" *Journal of Human Resources*, Winter 2004, v. 39(1), pp. 277-93
- Hajj, Mandana and Ugo Panizza. 2002. "Education, Childbearing, and Female Labor Market Participation: Evidence from Lebanon," *Journal of Development and Economic Policies*, v. 4(2), pp. 43-71.
- Heckman, James and Carmen Pagés. 2000. "The Cost of Job Security Regulation: Evidence from Latin American Labor Market," NBER Working Paper No. 7772, Cambridge, MA.
- Hunt, Jennifer. (1992): "The impact of the 1962 repatriates from Algeria on the French Labor Market", *Industrial and Labor Relations Review*, 45, 556-572.
- LABORSTA. 2004. International Labor Organization of the United Nations (ILO), Geneva.
- \_\_\_\_\_. 2004b. *Global Employment Trends*. Geneva.
- \_\_\_\_\_. 2004c. *Global Employment Trends for Youth*. Geneva.
- \_\_\_\_\_. 2003. *Global Employment Trends*. Geneva.
- \_\_\_\_\_. 2003b. *Minimum Wage Data Set*, ILO Bureau of Statistics. Geneva.
- \_\_\_\_\_. 2002. *Key Indicators of the Labor Market: 2001-02*. Geneva.
- \_\_\_\_\_. 1996. *Economically Active Population Estimates and Projections: 1950-2010*. Geneva.

- Jordan Department of Statistics. 2004. <http://www.dos.gov.jo> – accessed June 2004.
- Kanaan, Taher and Kardoosh, Marwan. 2002. “Employment and the Labor Market in Jordan,” presented at the Fourth Mediterranean Development Forum, Amman Jordan.
- Katz, Lawrence F. “Active Labor Market Policies to Expand Employment and Opportunity.” 1994. In *Reducing Unemployment: Current Issues and Policies*, 239 – 290. Missouri: Federal Reserve Bank of Kansas City.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2003. “Governance Matters III: Governance Indicators for 1996-2002.” World Bank Policy Research Working Paper 3106, Washington, DC.
- Kaufmann, Daniel and Aart Kraay. 2002. “Growth without Governance,” *Economia*, Vol. 3(1): 169-215.
- Keller, Jennifer and Mustapha Nabli. 2002. “The Macroeconomics of Labor Market Outcomes in MENA over the 1990s: How Growth Has Failed To Keep Pace with a Burgeoning Labor Market,” Egyptian Center for Economic Studies, Working Paper No. 71, Cairo, Egypt.
- Korenman, Sanders and David Neumark. 1997. “Cohort Crowding and Youth Labor Markets: A Cross-National Analysis,” NBER Working Paper 6031. Cambridge, MA.
- LaLonde, Robert. 1995. “The Promise of Public Sector-Sponsored Training Programs.” *Journal of Economic Perspectives* vol. 9(2): 9 – 2.
- Makdisi, Samir, Zeki Fattah, and Imed Limam. 2001. “Determinants of Growth in the MENA Countries,” Arab Planning Institute Working Paper 0301, Kuwait.
- Maloney, William and Jairo Nunez Mendez. 2003. “Measuring the Impact of Minimum Wages: Evidence from Latin America,” NBER Working Paper 9800, June 2003.
- Maloney, William and Eduardo Ribeiro. 1999. “Efficiency Wage and Union Effects in Labor Demand and Wage Structures in Mexico: An Application of Quantile Analysis,” Policy Research Working Paper 2131, World Bank, Washington, DC.
- McCormick, Barry and Jackline Wahba. 2000. “Return Migration, Savings and Entrepreneurship in Egypt,” presented at the Seventh Annual Conference of the Economic Research Forum in Jordan.
- McCormick, Barry and Jackline Wahba. 2004. Migration and Mobility in the Egyptian Labour Market,” Economic Research Forum Research Report 0401, Cairo, Egypt.
- Miles, Rebecca. 2002. “Employment and Unemployment in Jordan: The Importance of the Gender System,” *World Development*, Vol. 30(3), pp. 413-427.
- Montgomery, Edward. 1989. “Employment and Unemployment Effects of Unions,” *Journal of Labor Economics*, Vol. 7(2), 170-190.

- Montenegro, Claudio and Carmen Pagés. 2003. "Who Benefits from Labor Market Regulations? Chile 1960-1998". Policy Research Working Paper 3143, World Bank, Washington, DC.
- Murphy, Russell and Djavad Salehi-Isfahani. 2003. "Labor Market Flexibility and Investment in Human Capital," Virginia Tech Working Paper.
- Moretti, Enrico. 2002. "Estimating the Social Return to Higher Education: Evidence From Longitudinal and Repeated Cross-Sectional Data." NBER Working Paper No. 9108.
- Murphy, Russell and Djavad Salehi-Isfahani. 2003. "Labor Market Flexibility and Investment in Human Capital," Virginia Tech Working Paper.
- Myatt, Anthony and David Murrell. 1990. "The Female/Male Unemployment Rate Differential," *The Canadian Journal of Economics*, Vol. 23(2), pp. 312-322.
- Neumark, David and Donna Rothstein. 2003. "School-to-Career Programs and Transitions to Employment and Higher Education," NBER Working Paper 10060. Cambridge, MA.
- Neumark, David and William Wascher. 2004. "Minimum Wages, Labor Market Institutions, and Youth Employment: A Cross-National Analysis," *Industrial and Labor Relations Review*, v. 57(2), pp. 223-48.
- O'Higgins, Niall. 2003. "Trends in Youth Labour Market in Developing and Transition Countries". World Bank Social Protection Discussion Paper No. 0321, Washing, DC.
- Psacharopoulos, George and Harry Anthony Patrinos. 2002. "Returns to Investment in Education: A Further Update" World Bank Policy Research Paper 2881. Washington, DC: World Bank, September 2002.
- Pritchett, Lant. 1999. "Has Education Had a Growth Payoff in the MENA Region?" World Bank, Middle East and North Africa Working Paper Series No. 18, December 1999.
- Qatari Planning Council. 2005. *March 2004 Population Census*, State of Qatar.
- Rama, Martin. 1996. "The Consequence of Doubling the Minimum Wage: The Case of Indonesia," Policy Research Working Paper 1643, World Bank, Washington, DC.
- Ryan, Paul. 2001. "The School-to-Work Transition: A Cross-National Perspective" *Journal of Economic Literature*, Vol. 39 (March 2001), pp. 34-92.
- Roudi-Fahimi, Farzaneh. 2002. "Iran's Family Planning Program: Responding to a Nation's Needs," MENA Policy Brief, Population Reference Bureau, Washington, DC.
- Roudi-Fahimi, Farzaneh and Moghadam, Valentine. 2003. "Empowering Women, Developing Society: Female Education in the Middle East and North Africa," MENA Policy Brief. Washington DC: Population Reference Bureau, October 2003.

- Saudi Arabia Central Department of Statistics. 2003. *Social Statistics Labor Force Survey 2002*. Ministry of Economy and Planning, Riyadh, Saudi Arabia.
- Schiavo-Campo, S., G. de Tommaso, & M. Amitabha. 1997. "Government Employment and Pay in Global Perspective: A Selective Synthesis of International Facts, Policies and Experience". World Bank Policy Research Working Paper No. 1771, Washington, DC.
- Schiavo-Campo, Salvatore, de Tommaso Giulio and Mukherjee Amitabha. 1997. "An International Survey of Government Employment and Wages". Policy Research Working Paper No. 1806. Washington, DC: World Bank.
- Schneider, Friedrich. 2002. "Size and Measurement of the Informal Economy in 110 Countries Around the World," presented at a Workshop of Australian National Tax Center, Canberra, Australia, July 17, 2002.
- Seguino, Stephanie. 2002. "Why are Women in the Caribbean So Much More Likely than Men to Be Unemployed?" Economics Department Working Paper, Univ. of Vermont.
- Shimer, Robert. 1999. "The Impact of Young Workers on the Aggregate Labor Market," NBER Working Paper No. 7306. August 1999.
- Sianesi, Barbara and John Van Reenen, 2002. "The Returns to Education: A Review of the Empirical Macroeconomic Literature," Institute for Fiscal Studies Working Papers W02/05, London, England.
- Syrian Central Bureau of Statistics. 2003. *Results of the 2002 Labor Force Survey*.
- Tarantino, Gustavo Crespi. 2004. "Imputation, Estimation and Prediction using the Key Indicators of the Labour Market (KILM) Data Set," Employment Strategy Paper 2004/16, International Labor Organization, Employment Strategy Department, Geneva, Switzerland.
- Tzannatos, Zafiris. 2002. "Social Protection in the Middle East and North Africa: A Review." in *Employment Creation & Social Protection in the Middle East and North Africa*, edited by Heba Handoussa and Zafiris Tzannatos. Cairo, Egypt: AUC Press.
- United Nations Population Division. 2003. *World Population Prospects: The 2002 Revision*. New York: NY: United Nations.
- United States Department of State. 2002. *Country Reports on Human Rights Practices*. Bureau of Democracy, Human Rights, and Labor, U.S. Department of State, Washington, DC.
- Van Reenen, John. 2003. "Active Labour Market Policies and the British New Deal for the Young Unemployed in Context," NBER Working Paper No. 9576. Cambridge, MA.

van der Meulen Rodgers, Yana. 1999. "Protecting Women and Promoting Equality in the Labor Market: Theory and Evidence," Policy Research Report on Gender and Development Working Paper Series No. 6, Washington, DC: World Bank.

World Bank. 2004. MENA Development Report, "Unlocking the Employment Potential in the Middle East and North Africa". Washington, DC.

World Bank. 2004b. *MENA Development Report: Gender and Development in the Middle East and North Africa*. Washington, DC.

\_\_\_\_\_. 2004c. Doing Business Database. Washington, D.C.

\_\_\_\_\_. 2002. *Reducing Vulnerability and Increasing Opportunity" Social Protection in the Middle East and North Africa*. Washington, DC.

World Development Indicators (WDI). 2004. World Bank, Washington, D.C.





### Summary Findings

This paper investigates the youth labor market in the MENA region in order to identify factors contributing to the persistently high rates of unemployment and joblessness among MENA youth. The paper undertakes three parallel lines of inquiry. First, we review characteristics and trends related to the youth labor market. Second, we review findings from the research literature in order to identify determinates of labor market outcomes for youth. Third, we use survey data from Egypt and Morocco to address additional questions about the youth employment situation. While we do not test for causality empirically in this paper, our analysis suggests several regional factors that may be contributing to the high rates of unemployment and joblessness among MENA youth: strong labor supply pressures, rising female labor force participation rates, and labor market rigidities that may be interacting with these two factors. Public sector wage premiums and bureaucratic obstacles to the development of private sector enterprises may be especially important contributing factors. Despite many common regional trends, MENA countries also face unique circumstances suggesting unique policy prescriptions. This is especially true in comparing GCC and non-GCC countries.

**HUMAN DEVELOPMENT NETWORK**

#### **About this series...**

Social Protection Discussion Papers are published to communicate the results of The World Bank's work to the development community with the least possible delay. The typescript manuscript of this paper therefore has not been prepared in accordance with the procedures appropriate to formally edited texts. The findings, interpretations, and conclusions expressed herein are those of the author(s), and do not necessarily reflect the views of the International Bank for Reconstruction and Development / The World Bank and its affiliated organizations, or those of the Executive Directors of The World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. For free copies of this paper, please contact the Social Protection Advisory Service, The World Bank, 1818 H Street, N.W., Room G7-703, Washington, D.C. 20433-0001. Telephone: (202) 458-5267, Fax: (202) 614-0471, E-mail: [socialprotection@worldbank.org](mailto:socialprotection@worldbank.org) or visit the Social Protection website at [www.worldbank.org/sp](http://www.worldbank.org/sp).