



Human Development
Research Paper
2010/26

**Human Development in the
Middle East and North Africa**

Djavad Salehi-Isfahani





United Nations Development Programme
Human Development Reports
Research Paper

October 2010

Human Development
Research Paper
2010/26

**Human Development in the
Middle East and North Africa**

Djavad Salehi-Isfahani

United Nations Development Programme
Human Development Reports
Research Paper 2010/26
October 2010



Human Development in the Middle East and North Africa

Djavad Salehi-Isfahani

Djavad Salehi-Isfahani is Professor of Economics at Virginia Tech, and Non-resident Senior Fellow at Brookings Institution. E-mail: salehi@vt.edu.

Comments should be addressed by email to the author(s).

Abstract

Middle East and North African countries (MENA) have achieved much to be proud of in human development. Falling child mortality and fertility have transformed family structures in most MENA countries. Despite important advances in health, education, and income, there are certain aspects human development in which MENA countries have not progressed as far. There are inequalities in human development regionally, within each country and for specific demographic groups, most importantly for youth and women. In this paper I review the record of human development in the MENA region to highlight areas in which the region has been more successful, as well those in which human development has lagged in absolute terms or relative to economic growth. I draw attention to certain important characteristics of the region that distinguish it from other developing regions, in particular the presence of oil income and delayed demographic transition.

Keywords: Human development, Middle East and North Africa, Youth.

JEL classification: O15, N35, J13, J16, J21, J24

The Human Development Research Paper (HDRP) Series is a medium for sharing recent research commissioned to inform the global Human Development Report, which is published annually, and further research in the field of human development. The HDRP Series is a quick-disseminating, informal publication whose titles could subsequently be revised for publication as articles in professional journals or chapters in books. The authors include leading academics and practitioners from around the world, as well as UNDP researchers. The findings, interpretations and conclusions are strictly those of the authors and do not necessarily represent the views of UNDP or United Nations Member States. Moreover, the data may not be consistent with that presented in Human Development Reports.

1. Introduction

The Human Development Reports, introduced in 1990, have played an important role in broadening the measurement of human progress from economic growth to human development. The HDR project has facilitated the inclusion of important human capabilities, education and health, in addition to income in the rankings of countries and tracking of their economic development. HDRs have defined and redefined the concept of human development (Alkire 2009), adding other capabilities, such as personal freedom and human rights, to the measurement of human development, informing a wider set of policies. While the summary cross-country rankings have been confined to the three key indicators, various country and regional reports have probed human development deeper and broader.

Five acclaimed, in-depth studies for the Arab countries ---Arab Human Development Reports, 2002 through 2005, and 2009--- as well as more than a dozen individual country reports have pushed the human development agenda in the MENA region in important new directions, such as gender and human rights. In this paper I review the record of human development in the MENA region using the evidence contained in these reports, as well as in international data sets and the literature at large. I highlight areas in which the region has been more successful, as well those in which human development has lagged in absolute terms or relative to economic growth.

There are certain features of the MENA region that distinguish it from the rest of the developing world and that affect how we evaluate human development in the region. In addition to reviewing the general trends in human development, I will highlight a few salient characteristics of MENA economies that shape human development in the region, namely:

- High income from hydrocarbon exports, which drive a wedge between individual productivity and consumption.
- Demographic factors, such as delayed fertility transition and rapid growth of youth population.
- Imbalances in the labor markets, evidenced by high rates of youth unemployment and low participation of women in the labor market.
- High investment in schooling but with low productivity of education.

These phenomena are highly interconnected. For example, the rapidly growing youth population increases youth unemployment; the abundance of oil income leads to large public sectors as the principal destinations for educated youth, which results in high demand for diplomas but not productivity; and low productivity of education leads to high rates of unemployment for educated youth. Together these phenomena have shaped human development in the region in ways that is not easily picked up by the human development index, though they are well documented in the more in-depth regional and country reports.

While I discuss MENA countries as a group, I am fully aware of the region's high degree of heterogeneity in most aspects of human development. Disparities in per capita income, due to differences in endowments of oil and gas resources are well known. There are in addition large disparities in health and education, some of which are related to income while others result from differences in institutions, such as the degree of reliance on markets and the effectiveness of public services. However, as I argue below, there are enough similarities between the countries of the region in terms of common language and culture to warrant studying their human development in one report.

In the case of oil rich countries, the broader coverage of human development reports –e.g., in health and education – has adjusted the lopsided view that simple international per capita income comparisons tend to promote. But deeper issues related to the gap between riches without rising productivity require more detailed, region-specific analysis. For example, while oil income has enabled the oil-rich countries to improve average outcomes in education and health, its effect on women and youth has been more mixed. For example, in many oil-rich countries of the region rising incomes have expanded education of women faster than men without narrowing the gender gap in employment. But, the narrowing and even disappearance of the gender gaps in education and health has not meant greater gender equality in the family, the labor market, or the wider society (AHDR 2005, World Bank 2004a). Similarly, greater access to education has not meant greater access to jobs for the educated youth. Rising incomes from oil have increased the attraction of well-paid government jobs that are rationed based on university degrees rather than productivity, leaving their youth trapped in long queues for these jobs instead of investing in productive investment in human capital. These difficulties exist in non-oil rich countries of the region, where women and youth face challenging conditions in employment and social inclusion, though in the case of these countries human development rankings are more informative because their incomes reflect more closely their level of productivity and overall development.

HDRs rightly highlight women’s welfare as an important dimension of human development. In the MENA region, youth issues should also receive special attention because youth is an demographic group whose needs differ from children and adults. In some MENA countries, youth unemployment rates are 4-5 times higher than adult unemployment rates, compared to 2 or 3 times in other regions. In several oil-rich and oil-poor nations of the region youth are the most educated segment of the population, yet they suffer greater exclusion from economic and civic

life (Dhillon and Yousef 2009), a phenomenon that the HDI calculus does not adequately capture.

The plan of this report is as follows. The next section will review the special characteristics of human development in the MENA region. Section 3 discusses the record of human development in the region according to HDI and GDP per capita. Section 4 views human development issues from the perspective of the region's youth; section 5 discusses the gender gap in human development, highlighting the fact that despite impressive gains in health and education, women in MENA have low rates of labor force participation in the labor market. Section 6 discusses the role of poverty and inequality of income in human development.

2. Characteristics of Middle East Economic Development

Because of wide disparities in income, the countries of Middle East and North Africa (MENA) form a heterogeneous group of countries from the standpoint of per capita income. Therefore, it is important that the discussion of their human development, of which income is the most important determinant, be conducted with three groups of countries in mind. The oil-rich GCC countries (Bahrain, Oman, Qatar, UAE, and Saudi Arabia) along with Libya enjoy high levels of per capita income. This group accounts for only 9 percent of the region's 725 million population.¹ A second group, by far the largest, consists of middle income countries, including oil exporters Iran and Iraq, and accounts for 78 percent of total MENA population. The third group, which accounts for the remaining 13 percent, consists of the three lowest income countries of the region -- Djibouti, Sudan, and Yemen.

As Table 2 shows, the low income MENA countries, with a (population weighted) average per capita GDP of only \$1,880 in 2007 Purchasing Power Parity, are poorer than the average Sub-Saharan African country. The middle income group enjoys an average per capita GDP which is four times as high (\$7,842), which is similar to Latin America and the Caribbean (LAC). The average GDP per capita of the high income group is 3.5 times higher than the previous group (\$26,959), placing it in the range of incomes for advanced countries. With such vast differences in income, in discussing human development we must distinguish between these groups of MENA countries.

Despite disparities in income, the region enjoys a fair degree of homogeneity in other respects and is well integrated historically and culturally. A common language (Arabic) connects the vast majority of the region's population, while a common resource (oil), which directly or indirectly boosts incomes across the region, bonds its economies together. These commonalities ease the flow of wealth, human capital, and labor throughout the region, helping to shape an even more integrated future for MENA.

The countries of the MENA region also share similarities in demography. Although fertility transition is well under way in all MENA countries and in several countries, notably Iran, Lebanon, Tunisia, and the UAE, fertility has reached replacement level, for the region as a whole fertility transition has been slow (see Table 3). Transition to lower fertility is the most important and empirically consistent correlate of economic development. Recent economic development theory considers the change in the function of the family from procreators to producers of human capital as the most important factor for transition to modern economic growth (Becker 1992, Lucas 2002). Fertility transition is highly correlated with child health and education and

women's empowerment. It allows greater participation in economic and civic life for women, which increases their power inside the family and improves the allocation of family resources in the direction of health and education and in favor of girls (Thomas and Strauss 1995, World Bank 2007).

The relationship between average country income and fertility that one observes globally does not seem to hold for MENA in part due to the region's oil wealth and in part due to resilient social norms that affect women's participation in work outside the home (Salehi-Isfahani 2006). Large inflows of oil money imply that average incomes rise above productivity and therefore the opportunity cost of time, which is an important reason why fertility is lower in richer countries, does not increase in tandem with GDP per capita. This factor can explain the delayed transition in countries of the region that directly or indirectly depend on rent income from oil. For these countries, income per person is not a sufficient statistic for the quality of life.

As in the rest of the world, an important reason for the decline in fertility has been improved health and education, especially of women and children. In this regard, the delayed fertility decline in some of the oil-rich countries, despite their achievements in health and education, raises interesting questions about the role of oil riches in human development as distinct from growth of incomes. In the GCC countries, gender equity has failed to keep pace with rising incomes. In Oman and Saudi Arabia, in particular, given their GDP per capita, fertility is very high. Economic growth in these countries is yet to transform women's status from the traditional role of mothers and wife to that of a full citizen. This incongruity between high income and gender inequality is often blamed on Islam, but as Ross (2006) has argued, it is more likely caused by the high share of oil income than religion. Either way, the delay in fertility transition

and change in women's status are easy to measure and should figure more prominently in international comparisons of human development.

While fertility decline requires deep social transformation and are therefore less easily affected by inflow of money, health outcomes respond more quickly to increase in income no matter its source--higher productivity or rising oil rent. The oil rich countries have child mortality rates (CMR) at levels close to those in developed countries (see Table 4). In particular, low CMR in Oman and Saudi Arabia, the two high income MENA countries with high fertility, highlights the anomaly of human development in oil-rich countries. For purpose of comparison, Table 4 includes CMR for Sub-Saharan Africa and Asia. Successful reduction in CMR is noted across the board for middle income MENA countries, but not for the low income group. The former group has performed well in health, education, and fertility relative to its income.

Another distinguishing feature of MENA demography, which is related to high fertility in the past, is the unusually large size of the cohorts of young people that have been entering the labor and marriage markets in recent years. Except for the three poorest countries, MENA societies have generally provided their youth with schools and the incentives to enroll. As a result, education has expanded faster in MENA than in any other region, except East Asia (see Table 5). A rapidly increasing educated youth population is generally considered good for growth, but because of high rates of unemployment among the region's youth and low productivity of their education the region may fail to take advantage of its demographic window of opportunity (Dhillon and Yousef 2009).

3. The Human Development Index for MENA countries

How have MENA countries performed relative to other countries in their development experience? Table 5 shows that the experience of MENA countries, as captured by the HDI, has been nearly as diverse as their incomes. In 1990, the low income MENA countries shared with Africa the lowest HDI level but since then have managed to improve faster than all other regions. The increase in their HDI was twice as fast as their index of GDP per capita. The high income group did not do as well: in 2007 they enjoyed the second highest income index (0.91), after North America (1.01), but their HD index was only the third highest (0.89). The MENA middle income group began the period with a low index of human development (0.64), much lower than the Latin American countries (0.73) with similar average income, but was able to partially close the gap because its HD index increased faster than the index for LAC. According to the health index, Middle income MENA countries have enjoyed a relatively high level of health over the period under consideration while increasing their education index rapidly after starting at a low level. Life expectancy in MENA countries averaged over 71 years in 2007, which is the same as the average for non-MENA middle-income countries.² But, as with income, life expectancy had enormous variation across the region.

To get a more accurate account of the relative performance MENA countries given their resources, I compare their HDI index with the conditional average of HDI given GDP per capita. In Figure 1 the straight line is the population weighted regression line of the HDI on the index of GDP per capita.³ This graph shows that, given per capita income, in 1990 all MENA countries (with the exception of Jordan) were below the global HDI average, nor is there much improvement by 2005. The same holds for the education index, according to which, in 1990, all

MENA countries, again with the exception of Jordan, were below the regression line, indicating less education than predicted by their income. This situation, too, had changed little by 2005. The health index for MENA countries is slightly more favorable, according to which Jordan, Syria and Tunisia enjoyed higher health status given their income. The high income countries of MENA did particularly poorly in these conditional comparisons. Correcting for income, they lagged in the HDI as well as in its components.

4. Youth

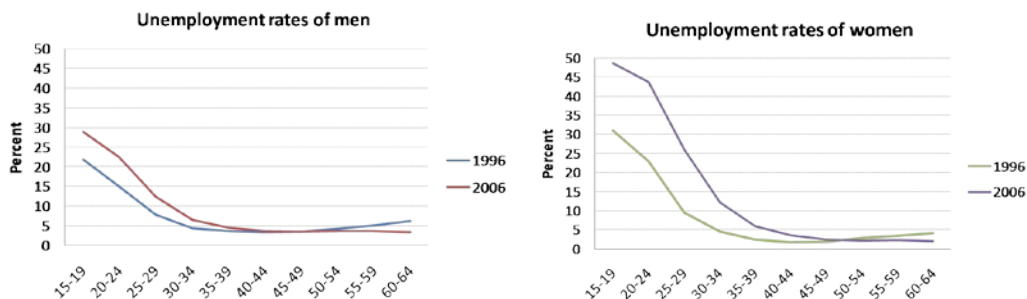
Young people represent a large part of MENA societies. They are the region's most educated generation yet, but face numerous obstacles in their transitions to employment and family formation. Transition to adulthood in MENA is marked by getting a regular job or settling on a career, getting married, and moving out of one's parents' home. Worldwide, transitions to adulthood are challenging (Lloyd 2005), but MENA youth seem to face greater challenges than in other countries: they suffer higher unemployment, longer waiting times for their first job, and involuntary delay in marriage. A growing literature documents how a combination of demographic push (the youth bulge) and inflexible institutions of education and labor market has led to the social exclusion of MENA youth (Dhillon and Yousef 2009).

Youth from different socio-economic status backgrounds have different experiences in transition to adulthood, but share the characteristic of belonging to the largest cohort in their countries. As members of a large demographic group, they suffer from similar labor market pressures caused by increase in supply of workers of all skill levels as well as imbalances in the marriage and housing markets.⁴ Table 7 shows the share of youth in total MENA population by country and how it has increased over time; in 2005 it was higher than any other developing

regions. In 1970, the proportion of youth (15-29 years old) in total population in MENA was in the range of other developing regions. But, in 2005, it had reached 0.30, which is much higher than in Europe and North America (0.21) and higher than developing regions --- Asia (0.26), LAC (0.27), and Africa (0.28).⁵ The high “youth bulge” has put immense pressure on the region’s labor markets, but it is not the sole cause of youth unemployment. Because of past rapid population growth, the rate at which new workers enter the MENA labor markets has far exceeded the rate at which employed workers retire plus new job creation, resulting in increasing youth unemployment. For example, in Iran, the ratio of those who enter the labor market (ages 20-24) to those who retire (ages 60-64) is 6, compared to 1.2 in the United States. In 2008, when the economy declined and no net new jobs were created, this huge imbalance between the entry and exit rates caused youth unemployment rates to jump higher (Salehi-Isfahani 2010).

Box 1. Youth unemployment in Iran

Iranian youth aged 15-29 are (in 2010) 35 percent of the total population, which is the highest in any country. They have achieved impressive increase in education, especially women, but face inhospitable labor markets. University educated young men and women have higher unemployment rates than those with less education. Although the government has slowly liberalized the formal labor markets, youth still face huge challenges in finding a job after graduation. This figure shows the lopsided nature of unemployment in Iran: the rates are about 5 percent for workers 30 years and older but several times as high for younger workers.



In fact, the 4 percent rise in overall unemployment during 1996-2006 is entirely from younger ages. During this period, the economy grew at a respectable 5 percent per year and the government relaxed the labor laws somewhat to allow for short term contracts in the public and private sector, which youth took advantage of (Egel and Salehi-Isfahani 2010), but was insufficient to absorb the nearly one million new entrants that out-numbered 6 to 1 the retiring cohort of workers. The good news is that the so-called “youth bulge” is about to move through, and the rate of entry into the job market will decline by 10 percent per year for the next ten years (Salehi-Isfahani 2010).

Because it is a cohort phenomenon, in many ways it cuts across social class, affecting adversely youth in different backgrounds. Where economic background seems to matter most is in determining how quickly youth transition to a job after leaving school. Paradoxically, those from poor backgrounds and with less education often find jobs faster. In Iran and Egypt, where detailed studies of family background are available, there is a sharp contrast between the unemployment rates of youth after leaving school, with the more educated and well off waiting longer to take a job (see Assaad et al 2010 and Egel and Salehi-Isfahani 2010). This puzzle is in

part explained by differences in the reservation wage, which depends on the ability of parents to support their children longer at home, or the family's need for youth labor income.

How do MENA countries compare to the rest of the world in terms of average employment outcomes for youth? Table 8 presents unemployment rates for youth (15-24 years old) in MENA countries and in the three groups of countries – low-, middle-, and high-income—as defined earlier. In MENA countries, during 2005-07 on average 26 percent of youth were unemployed, compared to 20 percent for middle income countries, the closest comparison group in terms of income for MENA countries. Low and high income countries had much lower youth unemployment rates, 10 and 14 percent, respectively, about twice their overall rates of unemployment. For the middle income group the ratio of youth to overall unemployment is about 3. In MENA this ratio varies widely, with the higher values found in oil-rich countries. In Egypt, Iran, Palestine, and Tunisia youth unemployment rates are the highest in absolute terms but not relative to the overall rates. In Egypt more than three quarters of the unemployed are youth under 30; about 70 percent in Iran.

The more glaring difference between MENA and comparison countries is in the length of time high school and college graduates have to wait to find their first job (see studies in Dhillon and Yousef 2009, Assaad et al 2010, and Egel and Salehi-Isfahani 2010). Youth wait a long time for their first job, often stretching to several years. The long gap between leaving school and finding the first job is related to the low rate of turnover in MENA formal labor markets, which is the destination for most educated MENA youth. Because of job protection, older employed workers (insiders) do not have to compete with new entrants, who are often more educated. In

Iran, the unemployment rate for workers over 30 is low by modern country standards—about 5 percent—while for workers under 30 it is about 25 percent (see Box 1).

Added to the difficult transition from school to work is the transition to marriage and family formation. The age at marriage in MENA has been rising for both men and women, and it is not all voluntary or for the “good” reasons, such as aiming for more education, desiring fewer children, or wanting to build a career. High levels of past fertility have created an imbalance in the marriage market—“marriage squeeze”—as the larger cohort of women have reached marriage age several years ahead of their male counterparts (Salehi-Isfahani and Egel 2009). As we will see below, to varying degrees there is an excess of men over women and an excess of educated women over men in MENA countries. Social norms regarding marriage in MENA countries seem incongruent with the realities of the age and education balance of youth. The social preference for men to marry younger and less educated women contributes to the involuntary delay in marriage.

a. Education

Education is an important component of human development in part because it enhances an individual’s opportunity set in employment. But to the extent that education fails to equip a person with the skills needed for productive employment, its main purpose to advance human development is compromised. Education is often suggested as a solution to unemployment, but in MENA educated youth are often less likely to be employed than the less educated. For example, in Egypt, those with the lowest education have the lowest unemployment (El Hamidi and Wahba 2006). Unemployment is usually highest among secondary school graduates, followed by tertiary graduates.

Table 10 shows the average rates of unemployment for 2000-2007 for four groups of countries.⁶ There are several interesting observations that emerge from this table. First, the rate of unemployment falls with education for high income countries and between secondary and tertiary for middle income countries, indicating that in these countries, on average, education is productive. Second, compared to other groups, MENA countries had higher unemployment rates at all levels of education. Third, in MENA countries secondary school graduates had the highest unemployment rate compared to other education levels. Fourth, the gap in the unemployment rate between MENA and other country groups was largest for tertiary workers, indicating the gap in productivity in this category between MENA and the rest of the world. If we accept that lower unemployment rates in the middle and high income countries are indications of higher productivity of their educated workers, the fact that MENA workers with secondary and tertiary education suffer greater unemployment suggests that education in MENA is less productive than elsewhere.

The low productivity of education in MENA is a well-recognized phenomenon, though there is disagreement regarding its source. Prtichett (1999) and Makdisi et al (2006) find that growth of education in MENA does not seem to explain any part of the increase in output. Two major studies of education, AHDR (2003) and World Bank (2007), examine the reasons behind the weak performance of education systems in MENA. The World Bank study emphasizes the role of incentives on the part of teachers and school administrators. It argues, as others have, that the strong role of the state in provision of education leads to distorted incentives, or lack of incentives to promote good education. The Arab Human Development Report 2004 views the problem of knowledge acquisition in the Arab countries in its broader social and political

context, raising larger issues such as lack of democracy and inequality of wealth as barriers to efficient accumulation of human capital.

A critical issue in the low productivity of MENA education is the narrow focus on testable skills. In the words of Arab Human Development Report (2003, p. 83): “There are entire generations of Arabs who have not learnt how to play a musical instrument, and who have not read literary works because they were not accustomed to do so in school. Creative pursuits taken for granted in developed country schools have simply been neglected in the Arab world, with damaging results to the creative potential of its people.” The immediate reason for why students “are not accustomed” to learn a wider set of skills in MENA schools is that these schools only require (and test) a narrow set of skills. They do a poor job of teaching sports, the arts, and even writing ---skills that enhance creativity and productivity ---because these skills are costly to teach and test, and the incentives to do so is lacking. Their main incentive, shared by the students and their parents, is to produce a diploma that grants its holder an (ever decreasing) advantage in the labor market. The Arab Human Development Report (2002, p. 61) recognizes this problem and offers a solution: “Rather than relying solely on the scores of public examinations, institutions of higher education should introduce a system of admission tests, tailored to the needs of each institution.”

b. Youth labor markets

There are two characteristics of MENA labor markets that affect youth unemployment. First, their incentive structure promotes acquisition of degrees at the expense of productive skills, causing a mismatch between what students learn in schools and what is needed in the increasingly globalized MENA labor markets. Second, the reservation wage of their educated workers is high, which enables those whose parents can afford (e.g., from middle and upper class backgrounds) to search longer to find a desirable formal sector job. I discuss these characteristics in turn.

The incentive structure is related to the fact that the market for educated labor in MENA has been historically dominated by the state (World Bank 2004b). MENA public sectors have the highest share of employment in total (15 percent) and of output (about 10 percent) in the world (Schiavo-Campo et al 1997, Salehi-Isfahani 2006). More recent evidence of the large role of the public sector in employment is presented in Table 9, which shows the ratio of the government wage bill to GDP for individual MENA countries for which such data are available, as well as for the four country groups, averaged over 2000-2008 to expand the number of countries being compared. Relative to their GDP, the wage bill in MENA countries is on average four times those of middle income countries. In addition to being large employers of workers in general, public sectors in MENA are the largest employers of educated workers (Assaad 1997, Salehi-Isfahani 2005), giving power to the public sector in setting the incentives for skill formation in formal education.

The rules governing public employment are not only rigid they often condition employment on having a university education. Furthermore, the regulation of formal private sector

employment by labor laws causes private employers to behave in a similar way. Labor laws generally raise the cost of laying off employees. While this is to a certain extent desirable to provide the incentive for both employers and employees to invest in each other, beyond a certain level it forces employers to prefer workers with strong *ex ante* signals of productivity and thus favor university-educated youth, and discourages the employees from supplying good effort and continue to upgrade their skills (Salehi-Isfahani and Murphy 2004). The formal private sector which is increasingly important in MENA economies is slow to influence the incentive structure away from credentials and in the direction of skill formation. In most advanced economies, a diploma is the initial signal to employers that the holder has certain certifiable skills. The diploma is only worth a foot in the door, though, because employers can ascertain for themselves once they hire a person what level of skills he or she has. Some of these skills, such as ambition, self-confidence, and teamwork, cannot be certified by schools and are only revealed on the job after a period of employment. Employer who are able to base individual pay and layoff decisions *a posteriori* based on information about the level of productivity that they observe, instead of *a priori* on the level of formal schooling as dictated by a government-set pay scale, provide the incentives for investing in non-testable skills. So, private employer discretion, which is much maligned in the literature that evaluated employment contract only by their effect on job security for insider workers, is crucial to making education more about skills and less about credentials. It is easy to blame publicly run schools for not being responsive to employer needs, but even responsive schools fail to teach the right skills, and students and their parents fail to demand them, if education is mainly a way to land a public sector job.

Most studies of education in MENA recognize that MENA education is more about diplomas than skill formation. The origin of diploma seeking behavior in the education system is often

traced to the dominant role of state in employment of educated workers (Assaad 1997, Birdsall 1999). As the state has raised its requirement for employment, the desired terminal degree which was once a high school diploma has now become a university education. This is the reason why in Egypt, where government employment guarantees have done most to promote “credentialism”, the share of wage and salary workers with tertiary degrees is much higher than in the more economically advanced Turkey -- 29 versus 11 percent (Salehi-Isfahani et al 2009).

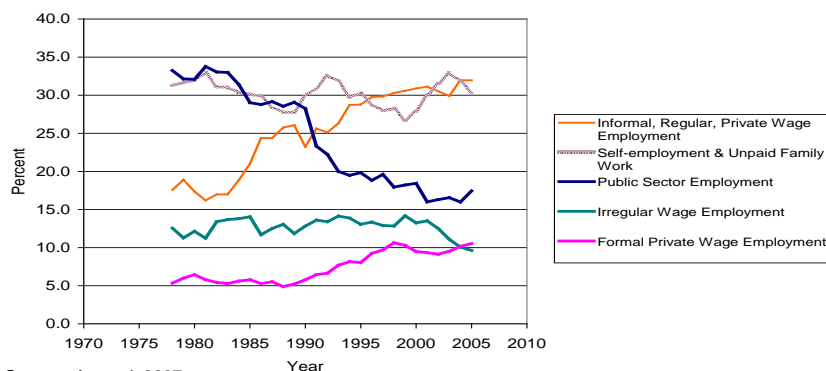
Most MENA countries have engaged in labor market reform of one kind or another. Egypt, where state domination of education and employment of the educated has been the greatest, is also the country that has taken the most decisive steps in recent years in labor market reform (see Box 2). The 2003 reform of the labor laws increased the discretion of employers in hiring, firing and compensation (Wahba 2009). In Iran, firms with fewer than 5 workers have been exempted from the labor laws but the reforms have stalled in the face of political uncertainty (Salehi-Isfahani 2005). Employers in the formal private sector are also permitted to hire workers on short term contracts, which have proliferated in recent years (Egel and Salehi-Isfahani 2010). Interestingly, in Iran, attempts by the government to increase job security by tight regulation of private sector employment have resulted in *less*, not more, stable contracts. As a result, the labor laws that do little to protect workers make it harder for employers to reward more skilled workers by offering them longer contracts. The 2003 Egyptian labor market reform that has liberalized short term contracts may in this respect fail to serve the need of young workers.

Box 2. Mismatch of skills in Egypt

Compared to the other two large countries of the region, Iran and Turkey, Egypt is poorer and less developed but it has the highest ratio of the tertiary educated—29 percent compared to 11 in Iran and Turkey. This undue emphasis has its origin in the incentives for education set by the policies of the 1960s when the government promised all high school graduates jobs in the public sector. Over time, as the public sector has out its ability to absorb educated workers, the promise weakened changed to a job guarantee for college graduates and later to long queues for all (Assaad 1997).

The 600,000 graduates of Egyptian high schools and universities who look for their first job each year face a deteriorating labor market condition. Assaad and Barsoun (2009) present evidence showing that the public sector as the most important destination for new labor market entrants has been replaced by *informal private wage employment*, rather than formal private sector jobs (see figure below). While the structure of labor demand has changed, the education system continues to supply the market with over a millions of high school and college graduates each year looking for formal employment.

Egypt: Distribution of New Entrants by Type of First Job (percent), 1975-2005



Source: Assaad, 2007.

As the figure shows, the formal private formal sector has been growing since 1990, possibly aided by economic reforms since then. Hopefully, someday these reforms will lead to the emergence of a vigorous private sector capable of competing in the global markets and create enough formal jobs to reinvigorate interest in the Egyptian society about investment in human capital at par with the interest in formal schooling that the expansion of public employment did decades ago. To do so, it must do more than create jobs for educated workers. It must also be able to reduce the mismatch of skills by influencing the supply side, that is, the type of graduates that the education system produces. The labor market reforms of 2003 have increased the discretion of private employers in rewarding productive skills instead of formal credentials. Gradually, such reforms will shift the incentives of families, students, and teachers toward investing in productive skills and away from production of diplomas.

The distorted incentive structure favors higher degrees at the expense of primary education. The market value of primary education appears to be near zero in Egypt (Birdsall 1999) and very low in Iran and Turkey (Salehi-Isfahani et al 2009). The latter study that compared returns across Egypt, Iran and Turkey finds that, unlike in advanced countries, private returns to education in these countries *increase* with the level of schooling. The authors attribute this difference to the fact that in advanced economies education is more aligned with market demand for skills while in these economies private returns to lower-level education is only realized if a person reaches secondary or tertiary levels. This is not to say that basic education is a waste of time, only that the market reward structure is heavily weighted toward higher degrees.

The second important reason for high youth unemployment in MENA is a high reservation wage, which is due to strong family support for children and, in some countries, the availability of oil income. The persistence of high youth unemployment in the last decade despite robust economic growth fueled by the oil boom is related to high expectations of educated youth for formal jobs (Razzaz and Iqbal 2008). In oil rich countries, high unemployment of educated nationals has been linked to the rent income that enables youth to wait long for government jobs (Yousef and Dyer 2007). Even in Egypt, which is a poor country by MENA standards, youth unemployment is not associated with poverty and low education, suggesting that reservation wage plays a role in long searches (Hassan and Sassanpour 2008).

a. Marriage and family formation

Age at marriage has increased sharply in MENA countries, some of which is involuntary. Delay in marriage can be voluntary and in line with human development if it is the result of decline in demand for children and increased demand for education, especially by women. However,

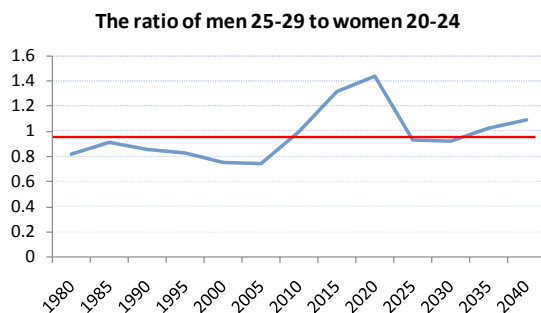
involuntary delay can be very costly, especially in MENA societies in which sexual relations outside marriage is prohibited legally or by social norms (Singerman 2007). Involuntary delay in MENA results from age imbalance in the marriage market and social conventions that raise the cost of marriage.

The age at marriage in MENA countries is higher than in other world regions, despite the fact that on all related accounts ---fertility, education, and sexual relations before marriage—the opposite is expected (Salehi-Isfahani and Dhillon 2008). This suggests that delay in marriage in MENA countries is in part involuntary. An obvious reason is age imbalance in the marriage market known as “marriage squeeze.” This imbalance results from past high fertility, which increases the size of cohorts entering marriage age but at different speeds for men and women. The larger cohorts of women, born in the high fertility period of the 1980s, have in recent years reached marriage age several years ahead of the corresponding larger cohorts of men. Because of the customary age difference of several years, these cohorts of women are matched against the smaller cohorts of men born a few years earlier, causing age imbalances as high as 25 percent. To get an idea of the size of the age imbalance, Table 11 presents the ratio of men aged 25-29 to women aged 20-24, which assumes a fixed age difference at marriage of five years---a reasonable assumption for most MENA countries but not for the more advanced countries in the table. The ratio for the latter group is about unity, while for MENA countries a “shortage of men” of 15-25 percent has been the state of the marriage market in recent years (see also box 3).

Another factor pushing the age of marriage higher is the high cost of marriage, which is caused by social conventions regarding bride price that push up the cost of marriage ceremonies

Box 3. Marriage squeeze in Iran

Marriage squeeze is a term used to describe age imbalance in the marriage market. During period of rapid population growth, larger cohorts of women reach marriage age several years ahead of women, causing the ratio of marriage age women to men to decline. The rise and fall of fertility in the early 1980s in Iran has cause a rather extreme form of this phenomenon. This figure shows the ratio of men 15-29 years old to women 20-24 years old, which represents the imbalance between the supply of groom and brides in the marriage market (assuming an age difference of 5 years for married couple).



Source: United Nations Population Prospects, 2008.

It appears that the ratio of men to women has bottomed at about 0.75, and will be rising to 1.4 by 2020. The intense pressures from demography have been compounded by high unemployment to push the marriage age higher than warranted by the desire for smaller families and more education. Such involuntary delay in marriage is particularly costly in Islamic societies such as Iran where relation between men and women outside of marriage is socially and legally forbidden.

(Singerman 2007) and the high cost of housing. An analysis by Assaad and Ramadan (2009) shows that the observed decline in age at marriage of Egyptian men is in part due to increased

access to housing resulting from a 1996 housing market reform that made rental housing more readily available.

5. Women

MENA societies (and sometimes Muslim societies in general) have been characterized as patriarchal societies in which gender inequities are present in economic, political, social spheres (Moghadam 2004). There are certain aspects of the Islamic law (*sharia*) that call for an unequal treatment of men and women, and furthermore the traditional social norms of the region describe women's role primarily as mothers and homemakers. However, there is considerable variation (e.g., between Tunisia and Saudi Arabia), in the extent to which the *sharia* influences the laws of particular countries and the extent to which gender relations have progressed (Moghadam 2003, AHDR 2005). Even where the unequal treatment at the macro level has not improved by much, women have made significant progress in important dimensions of human development, namely health and education. In many MENA countries, notably Iran, Jordan, and Kuwait, women's life expectancy and average years of schooling equal or exceed those of men, and the decline in fertility throughout the region has created the basis for more equal status within the family. Despite these improvements, full gender equality remains elusive.

Perhaps the most important manifestation of persisting gender inequality in MENA societies is lower participation of women in market work. This is especially striking because women's participation in market work generally improves with increase in women's education and decline in fertility. For example, women in Malaysia, a Muslim country, are three to four times as likely to engage in market work as women in MENA countries with similar education and fertility, such as Egypt, Iran, Tunisia, and Turkey.

MENA countries compare favorably with the rest of the world in terms of the gender gap in school enrollment and average years of schooling (World Bank 2004b, p. 67; see also Tables 12 and 13).⁷ As is the case for other country groups in these tables, in MENA countries enrollment rates at primary and secondary levels for women and men are similar while women have an edge at the tertiary level (Table 12, averages for 2000-2007). The enrollment rates of MENA women is about equal to men in primary (92 percent), lower in secondary (72 vs. 77 percent), but higher in tertiary (32 vs. 29 percent). This is roughly similar to the situation in middle income countries. Evidently, women have lower dropout rates at the secondary level, which could be related to men's need to work at an earlier age and the fact that for many in the lower rungs of the academic ladder a university education does not do much to their employability. The average years of schooling also indicates greater equality in education (Table 13). Finally, Figure 5 compares the rate of increase in average years of schooling of men and women in MENA with other regions. It is apparent from the trend line in this figure that, with the exception of East Asia, MENA education has expanded faster than other regions, especially for women, who in recent years have overtaken men in this respect.

Despite the rise in education of MENA women relative to their male counterpart in MENA and women in other countries, their participation in the labor force remains lower than any region (Table 12). The World Bank (2004) flagship report on gender refers to this phenomenon as the "gender paradox". The participation rate of women in MENA is 26 percent, compared to 74 percent for MENA men, and 61 percent for women in middle income countries.⁸ Women's low participation in the labor markets in MENA societies is more of a puzzle when we consider the fact that, as shown in Table 3, fertility has declined substantially in most MENA countries (Salehi-Isfahani 2006). The links between fertility, women's education, and women's labor

force participation is well established by historical trends and by micro level studies. It is generally agreed that the relation between economic development and women's labor force participation is U-shaped, as participation initially falls when traditional jobs in agriculture disappear but eventually rises as manufacturing and service sectors expand (Goldin 1995, Mammen and Paxson 2000). One difference between the experience of East Asian and MENA countries in this respect is the slow replacement of traditional women's jobs in agriculture and manufacturing with modern manufacturing and service jobs in MENA countries.

This is particularly the case in countries of the MENA region where growth of incomes has benefited more from oil money than rising productivity. This suggests the possibility that, as in the case of the long search of MENA youth for appropriate jobs after leaving school, lower participation rates of MENA women is in part due to higher reservation wages, which are in turn the result of external (oil) income (Salehi-Isfahani 2006). And, again as in the case of youth, patriarchal social norm that define men's role as the breadwinner and women as home makers may also figure in explaining low participation of women in market work (Karshenas 2001). The role of social norms is seen also in the low political participation of women in MENA and in the segmentation of market work along gender lines (AHDR 2005, Assaad and Barsoum 2007). Interestingly, given these social norms, it has been observed that the enforcement of gender separation for religious reasons in public spaces can affect women's human development positively (Assaad 2002, Mehran 2003, Salehi-Isfahani 2006). This phenomenon is yet to be established as a causal factor, but it is plausible that under the right circumstances the substitution of patriarchy at the level of the state for patriarchy at the level of the family, as for example has taken place in Iran since the Islamic Revolution of 1979, can expand women's access to education and work outside the home.

Employment is an important component of gender equality and women's empowerment. Evidence from other regions indicates that greater employment opportunities for women can lead to greater bargaining power within the family, which can positively affect the distribution of household resources in the direction of health and education of children (Thomas 1997, Strauss and Thomas 1995, World Bank 2007). One way to reconcile greater empowerment of MENA women as a result of more education and lower fertility with their low participation is to note that real change in the economic and social status of women does not follow paid work in general, but work in the professions (Goldin and Katz 2001). In this sense, perhaps the greater participation of women in export sector jobs, as in Morocco and Tunisia, and lack thereof in high wage MENA economies that benefit from oil money, such as Iran, may not constitute real differences in women's empowerment between these countries.

Oil income and social norms are likely reasons for the lag in women's empowerment in the Arab countries of the Persian Gulf, where participation rates are less than 10 percent. In Saudi Arabia, for instance, women outnumber men in universities, but their participation in the civic and economic life is very limited, as exemplified by the ban on women driving. But even in this narrow geographic area of the Persian Gulf, there is a fair amount of variety in women's status, from the relatively liberal, though small, societies of Bahrain and Dubai to the mixed situation in Iran to the conservative Saudi Arabia.

6. Poverty and income inequality

Much of the discussion about human development is conducted on the basis of national averages, but, as with income, there are inequalities in various dimensions of human development that makes comparison based on averages inaccurate. I have already discussed an important aspect

of MENA inequality, that of gender. In this section I consider how income inequality may change the perception of human development in MENA over time and compared to other regions.

Ideally, where data permit, comparisons of human development over time and across countries should take into account the distributions of human development indicators. Attempts have been made to extend the measurement of human development to include income inequality (Hicks 1997), but it has not yet become a systematic part of human development reporting. This is in part because international data about distributions of indicators are not as readily available as their averages. For MENA countries, we know very little beyond the inequality of income and expenditures (see Bibi and Nabli, 2009, for an excellent review of evidence on inequality of income).

MENA countries are on average more equal in terms of income than middle income countries but not low or high income countries (Table 15). The average Gini coefficient for MENA (averages for 2000-2007) is 38.20, compared to 43.56 for middle income countries and 36.23 for the high income group. Since the majority of MENA countries fall into the middle income category, these data indicate that they are on average more equal than other developing countries.

Inequality of income is not necessarily correlated with inequality in other dimensions of human development, such as education and health. Education and health are in large part publicly provided so their distribution can be more equal than the distribution of income. In most MENA countries education even at the tertiary level is freely provided (though on a competitive and therefore rationed basis), which should lead to greater equality of years of

schooling. This is clear in the case of Iran, where the distribution of years of schooling has improved over time while that of income has not. For example, the Gini coefficient for years of schooling for those above the schooling age (age 24) fell from 0.50 for cohorts born in the 1960s to 0.20 for cohorts born in the 1980s (author's calculations from survey data). This decline is in contrast with the relatively stable Gini coefficient for the distribution of per capita income and expenditures in Iran since the 1970s, which stood between 0.40-0.45 (Salehi-Isfahani 2009).

The increase in family out-of-pocket expenditures on education, connected to the expansion of private schools and private tutoring has created a new source of inequality in education. For example, in Egypt, Iran, Jordan, and Turkey private tutoring has become an essential part of preparation in admission into universities (Assaad and Elbadawy 2007, Hartmann 2007, Tansel and Bircan 2004). These expenditures naturally create inequities in educational achievement as the poor are unable to afford these costs and thus may lose in the competition for limited spaces in public universities.

There is less known about the distribution of health outcomes in MENA countries. A recent World Bank (2009) study on MENA health reports that socioeconomic inequities exist in health status and the use of health care services. In most MENA countries the state provides health services at some level, but in 10 out of 22 countries households rely heavily on out-of-pocket expenditures (defined as 25 percent or more of total health expenditures; see World Bank 2009).

7. Civil society and human security issues

There has been substantial increase in the activities of non-governmental organizations in several MENA countries, such as Egypt, Jordan, Morocco, that have helped expand the domain of

individual action outside place of work and the family into the society at large. These activities are often viewed from the angle of their opposition to the state and as the main vehicle for democratic reform in the region. With the notable exception of Turkey, there has been little improvement in democratic governance MENA societies, so a main goal of human development to enable individuals to fully participate in the political life of their countries remains unfulfilled. Ultimate decisions about big issues are outside the purview of ordinary citizens. Yet the opening up of the public space to non-governmental activities, where it has occurred, has made a significant difference in the lives of individuals in terms of serving their needs for civic engagement and in policy making outside the realm of the larger political issues that remain the prerogative of largely unaccountable political leaders. The 2003 Arab Human Development Report considers civil society as a pillar of human development progress. Civil society can improve human development directly by allowing individuals to express themselves in a social context as well as through better policies that fit human development needs. Reform of education, employment and family laws can proceed with input from ordinary citizen through informal and formal non-governmental associations.

Another important dimension of human development is human security, which is related to several issues discussed in this report, such as health, education and poverty, but goes beyond these to include war and destruction and political and domestic violence. The latest Arab Human Development Report (2009) contrasts the emphasis placed in the Arab societies on state security, sometimes at the expense of human security. Arab regimes often use external threats as an excuse to limit internal freedoms, which compromises human development in this regard. However, authoritarian regimes have also championed populist policies that have improved the welfare of the poor, such as land reform, and public health and education. Land reform and

expansion of schooling under Nasser in Egypt, and improvements in child health in Syria (which has the lowest child mortality in MENA), are good examples of the so-called authoritarian compact. In this sense, the tension between the state and individual security is overstated and their complementarities ignored.

8. Concluding remarks

MENA countries have achieved much to be proud of in human development. Falling child mortality and fertility have transformed family structures in most MENA countries. At the level of the family the relationship between men and women and parents and children have changed as the traditional gender roles have changed. At least among the rising middle class in the region, specialization of women in procreation, having children as a source of support for parents in old age, and putting children to work instead of sending them to school have been replaced with new roles -- parents as producers of human capital and the children as the focus of family investments.

Despite fundamental positive transformations in health, education, and income, there remain certain important aspects of MENA human development that have not progressed as far as these aspects. There are inequalities in human development regionally, within each country and for specific demographic groups, most importantly for youth and women. Issues of human development for youth and women are of special interest because they reveal structural problems in MENA societies that inhibit youth and women from leading productive and creative lives in accordance with their full potential. In the case of youth, rising education has not eased the transition to adulthood, as indicated by the long spells of unemployment between the time they leave school and land their first job and involuntary delay in marriage. In the case of women,

fertility transition and rising education have failed to lead to the greater participation in economic and social life of their respective countries. To remove these barriers MENA societies must undertake challenging institutional reforms. For youth, institutional reform entails improving the signals that tell young people what skills to learn, tell firms whom to hire and how much to pay, tell credit agencies to whom to lend, and tell families how to evaluate the potential of a young person as a future spouse or parent. In the Middle East many of these signals and incentives are skewed, leading to adverse consequences for young people, including a mismatch between those skills obtained in the education system and those demanded for jobs in the growing private sector. This requires a greater voice for private employers relative to the traditional employer of graduates –the state-- which has dominated labor markets in MENA countries since independence. It also requires greater say for private employers in determining individual productivity and compensation. Among policy changes that would remove these distortions are: offering greater flexibility in private sector hiring, compensation, and dismissal practices, encouraging "soft skills" formation through university admissions policies, and reforming labor and credit markets to promote career trajectories among young people (Salehi-Isfahani and Dhillon 2009).

To enable women to participate more fully as citizens and productive individuals is more complicated because it goes beyond policy reform and involves changes in gender norms. As the traditional roles for women as mothers and homemakers places less and less demand on their time, avenues for civic and economic participation must be found outside the home to help them reach their full potential as contributors to the modern society. In this regard, policies that make labor markets more hospitable for women would help not only with increasing their labor force

participation directly, but also indirectly as it helps change the norms that inhibit their work outside the home.

References

Alkire, S. (2009), "Conceptual Overview of Human Development: Definitions, Critiques, and Related Concepts," UNDP, 2009.

Assaad, R. (1997). "The effects of public sector hiring and compensation policies on the Egyptian labor market," *World Bank Economic Review*, 1997, 11, 85-118.

Assaad, R. and A. Elbadawy, "Private and Group Tutoring in Egypt: Where is the Gender Inequality? ERF working paper.

Assaad, R., C. Binzel, and M. Ghadallah (2010). Transitions to employment and marriage among young men in Egypt. *Middle East Development Journal* 2 (1).

Assaad R. and M. Ramadan (2009). "Did housing policy reforms curb the delay in marriage among men in Egypt?" MEYI Policy Outlook, the Brookings Institution.

Becker G. S. (1992) "Fertility and the Economy," *Journal of Population Economics*, Vol. 5 (3) (1992), pp. 185-201.

Bibi, S. and M. K. Nabli (2009), "Income inequality in the Arab region: Data and measurement, patterns and trends," *Middle East Development Journal*, 1(2), pages 275-314.

Birdsall, N. and L. O'Connell (1999). "Putting Education to Work in Egypt," Carnegie paper no. 5, Washington DC.

<http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=685>

Dhillon, N. and T. Yousef (2009), eds., *Generation In Waiting: The Unfulfilled Promise Of Young People In The Middle East*. The Brooking Institution Press.

Easterlin, R. A. (1987), Chicago, IL: University of Chicago Press, Second Edition.

Goldin, C. (1995), "The U-shaped female labor force function in economic development and history," in T. P. Schultz, ed., *Investment in Women's Human Capital*, Chicago: University of Chicago Press.

Goldin, C. and L. Katz (2001), "On the pill", *Milken Institute Review*, October, pages 12-21.

El-Hamidi, Fatma and Jackline Wahba. (2006). "Why Does the MENA Region Have Such High Unemployment Rates?" Working Paper 270. University of Pittsburgh, Department of Economics.

Egel, D. and Salehi-Isfahani, D. (2010). Youth transitions to employment and marriage in Iran: evidence from the school to work transition survey *Middle East Development Journal*, 2(1), 1-32.

Hartmann, S. (2007). The informal market of education in Egypt—Private tutoring and its implications. In T. Hüsken (Ed.), *Youth, gender and the city* (pp. 91–124). Cairo, Egypt: Goethe Institute.

Hassan, M. and C. Sassanpour (2008). "Labor Market Pressures in Egypt: Why is the Unemployment Rate Stubbornly High?" With Mohamed Hassan, *Journal of Development and Economic Policies*, 10(2), July 2008

Hicks, D. A., (1997), "The Inequality-Adjusted Human Development Index: A Constructive Proposal," *World Development*, 25(8), pp. 1283-1298.

Karshenas, Masood (2001), "Economic liberalization, competitiveness and women's employment in the Middle East and North Africa," in D. Salehi-Isfahani, ed., *Labor and Human Capital in the Middle East: Studies of Labor Markets and Household Behavior*, Reading, U.K.: Ithaca Press.

Lloyd, C. B. (2005). *Growing up global: the changing transitions to adulthood in developing countries*, National Research Council and Institute of Medicine. The National Academies Press.

Lucas, R. E. (2002). *Lectures on Economic Growth*. Cambridge: Harvard University Press.

Mammen, K. and C. Paxson (2000), "Women's work and economic development," *Journal of Economic Perspective*, 14(4), 141-164.

Moghadam, V. M. (2003), "Engendering Citizenship, Feminizing Civil Society: The Case of the Middle East and North Africa," *Women & Politics* 25(1/2):63-88.

Moghadam, V. M. (2004), "Patriarchy in Transition: Women and the Changing Family in the Middle East," *Journal of Comparative Family Studies*, 35(2), 137–162.

Pritchett, Lant (1999), *Has education had a growth payoff in the MENA region?*" MENA Working paper series, no. 18, Washington DC: World Bank.

Makdisi, S., Z. Fattah, and I. Limam (2006). "Determinants of growth in the MENA region," in *Explaining Growth in Middle East and North Africa*, J. Nugent and M. H. Pesaran (eds.) London: Elsevier.

Razzaz, Susan and Farrukh Iqbal (2008), "Job Growth without Unemployment Reduction: The Experience of Jordan," The World Bank, April 10, 2008.

Ross, M. L. (2008). Oil, Islam and Women. *American Political Science Review*, 102 (1).

Salehi-Isfahani, D. (2005). Human resources in Iran: potentials and challenges. *Iranian Studies*, 38 (1), 117-147.

Salehi-Isfahani, D. (2006), "Microeconomics of growth in MENA: the role of households", in Nugent, J. & Pesaran, M. H. (Eds.) *Explaining Growth in Middle East and North Africa*, Elsevier.

Salehi-Isfahani, D. (2008), "Growing up in Iran: Tough times for the Revolution's children," *Brown Journal of World Affairs*. 15 (1), 63-74.

Salehi-Isfahani, D. (2010), "Iranian youth in times of economic crisis,"Dubai Initiative, Harvard Kennedy School working paper.
http://belfercenter.ksg.harvard.edu/publication/20414/iranian_youth_in_times_of_economic_crisis.html.

Salehi-Isfahani, D. and D. Egel (2007). Youth exclusion in Iran: The state of education, employment and family formation. Wolfensohn Center for Development, The Brookings Institution.

Salehi-Isfahani, D. and D. Egel (2009). Beyond statism: Toward a new social contract for Iranian youth. In N. Dhillon and T. Yousef (Eds.), *Generation in Waiting: The Unfulfilled Promise of Young People in the Middle East*. Washington, DC: Brookings Institution Press.

Salehi-Isfahani, D. and N. Dhillon, 2008. "Stalled Youth Transitions in the Middle East: A Framework for Policy Reform," Wolfensohn Center for Development Working Paper, The Brookings Institution.

Salehi-Isfahani, D., I. Tunali, and R. Assaad (2009), "A comparative study of returns to education in Egypt, Iran and Turkey," *Middle East Development Journal*, December, 1(2), 145-187.

Salehi-Isfahani, D. and G. Taghvatalab (2009). The changing pattern of marriage in Iran: the role of marriage squeeze. Technical report, Paper presented at the XXVI World Congress of the IUSSP, Marrakech 2009.

Singerman, D. 2007. "The Economic Imperatives of Marriage: Emerging Practices and Identities Among Youth in the Middle East." Brookings Working Paper.

Tansel, A. and F. Bircan (2004), "Private Tutoring Expenditures in Turkey," IZA working paper.

Thomas, Duncan. 1997. "Incomes, Expenditures, and Health Outcomes: Evidence on Intrahousehold Resource Allocation." In Lawrence Haddad, John Hoddinott, and Harold Alderman, eds., *Intra-household Resource Allocation in Developing Countries: Models, Methods and Policy*. Baltimore and London: Johns Hopkins University Press for the International Food Policy Research Institute.

Salvatore Schiavo-Campo Giulio De Tommaso Amitabha Mukherjee, 1997. "Government Employment and Pay: A Global and Regional Perspective," World Bank Policy Research Working Paper No. 1771.

Strauss, John and Thomas, Duncan (1995), "Human resources: Empirical modeling of household and family decisions," *Handbook of Development Economics*, in: Hollis Chenery & T.N. Srinivasan (ed.), *Handbook of Development Economics*, edition 1, volume 3, chapter 34, pages 1883-2023 Elsevier.

UNDP (2002). *The Arab Human Development Report 2002*.

UNDP (2003). *The Arab Human Development Report 2003*.

UNDP (2005). *The Arab Human Development Report 2005*.

UNDP (2009). *The Arab Human Development Report 2009*.

Wahba, J. (2009). "The Impact of Labor Market Reforms on Informality in Egypt." Gender and Work in The MENA Region Working Paper Series No 3, The Population Council, Cairo.

World Bank (2004b), *Unlocking the Employment Potential in the Middle East and North Africa*, The World Bank, Washington DC.

World Bank (2007) *The Road Not Travelled: Education Reform in the Middle East and North Africa*, The World Bank, Washington DC.

World Bank (2004a) *Gender and Development in the Middle East and North Africa: Women in the Public Sphere*, The World Bank, Washington DC.

World Bank (2009) *Who Pays? Out-of-Pocket Health Payments and Equity Implications in the Middle East and North Africa*, World Bank Washington DC.

Yousef, T. and P. Dyer 2007. "Will the Current Oil Boom Solve the Employment Crisis in the Middle East," with Paul Dyer, in *The Arab World Competitiveness Report*. Geneva, World Economic Forum, 2007, pp. 31-39.

Tables

Table 1. The list of countries in MENA categories

MENA	MENA low income	MENA-middle income	MENA high income
Algeria	Djibouti	Algeria	Bahrain
Bahrain	Sudan	Egypt	Kuwait
Egypt	Yemen	Iran	Libya
Iran		Iraq	Oman
Iraq		Jordan	Qatar
Jordan		Lebanon	Saudi Arabia
Kuwait		Morocco	United Arab Emirates
Lebanon		Palestine	
Libya		Syria	
Morocco		Tunisia	
Palestine		Turkey	
Oman			
Qatar			
Saudi Arabia			
Sudan			
Syria			
Tunisia			
United Arab Emirates			
Yemen			

Table 2. Per capita GDP in MENA region, 1990-2005

Region	1990	1995	2000	2007
MENA-low	1,011	1,119	1,334	1,880
MENA-mid	5,244	5,562	6,226	7,842
MENA-high	20,474	21,765	22,300	26,959
Africa	1,688	1,553	1,589	1,929
Asia	2,649	3,211	3,684	5,184
LAC	7,102	7,679	8,268	9,631
Oceania	18,126	19,109	21,656	24,113
Europe	16,429	15,680	17,908	21,712
N. America	31,454	33,249	38,472	42,442

Note: Population weighted averages, in PPP USD.

Table 3. Total Fertility Rates for selected countries and regions

	1990	1995	2000	2005	2010	2015
Algeria	4.13	2.89	2.53	2.38	2.26	2.16
Egypt	3.91	3.50	3.16	2.89	2.68	2.51
Iran	3.95	2.50	2.12	1.83	1.74	1.79
Iraq	5.80	5.40	4.63	4.11	3.66	3.26
Jordan	5.14	4.32	3.53	3.13	2.81	2.54
Kuwait	3.20	2.61	2.30	2.18	2.09	2.01
Lebanon	3.00	2.70	2.09	1.86	1.85	1.85
Libya	4.10	3.41	3.03	2.72	2.47	2.26
Morocco	3.66	2.97	2.52	2.38	2.26	2.16
Oman	6.30	5.10	3.80	3.09	2.84	2.64
Palestine	6.46	6.03	5.63	5.09	4.50	3.93
Qatar	4.10	3.38	2.92	2.43	2.27	2.17
Saudi Arabia	5.45	4.62	3.81	3.17	2.83	2.56
Syria	4.86	4.02	3.64	3.29	2.93	2.64
Tunisia	3.13	2.32	1.97	1.86	1.82	1.80
Turkey	2.90	2.57	2.23	2.13	2.04	1.97
UAE	3.88	2.97	2.49	1.95	1.88	1.85
Yemen	7.70	6.73	5.90	5.30	4.65	4.08
Asia	3.01	2.69	2.50	2.35	2.26	2.18
Africa	6.08	5.72	5.41	5.08	4.66	4.20

Source: United Nations, Population Prospects, 2008 revision.

Table 4. Child mortality rates for selected countries and regions

	1995	2000	2005	2010	2015
Algeria	52.0	41.0	33.0	27.3	23.0
Egypt	57.7	46.7	40.7	34.7	29.3
Iran	52.0	41.0	34.0	27.7	23.0
Iraq	55.7	45.0	40.7	36.0	34.0
Jordan	32.0	26.0	21.7	18.0	15.7
Kuwait	12.0	11.0	10.0	9.30	9.00
Lebanon	33.3	29.7	26.0	22.0	19.7
Libya	26.3	23.0	19.7	17.0	15.0
Morocco	59.0	45.7	36.0	29.3	24.3
Oman	23.0	17.3	13.7	11.7	11.0
Palestine	30.0	24.3	20.3	17.3	15.0
Qatar	15.3	12.0	10.0	9.00	9.00
Saudi Arabia	31.0	26.0	21.7	18.7	16.3
Syria	28.0	21.7	18.3	16.0	14.0
Tunisia	30.0	25.0	22.3	19.0	16.7
Turkey	47.7	36.3	31.7	27.0	23.7
UAE	13.0	11.3	11.0	10.0	9.3
Yemen	112.0	95.3	78.7	63.7	51.0
Asia	73.3	65.3	58.3	52.0	46.3
Africa	176.0	160.7	147.7	133.3	119.7

Source: UNDP

Table 5. HDI index and its components

	HDI				GDP pc Index			
	1990	1995	2000	2007	1990	1995	2000	2007
MENA-low	0.42	0.45	0.48	0.53	0.38	0.4	0.43	0.49
MENA-mid	0.64	0.67	0.71	0.75	0.65	0.66	0.68	0.71
MENA-high	0.80	0.83	0.85	0.89	0.88	0.89	0.89	0.92
Africa	0.43	0.43	0.45	0.49	0.41	0.39	0.40	0.42
Asia	0.58	0.62	0.66	0.71	0.45	0.5	0.54	0.61
LAC	0.73	0.76	0.79	0.82	0.7	0.72	0.72	0.75
Oceania	0.89	0.92	0.95	0.97	0.81	0.83	0.84	0.85
Europe	0.84	0.83	0.85	0.88	0.83	0.8	0.83	0.87
N. America	0.92	0.93	0.95	0.96	0.96	0.97	1.00	1.01
	Education Index				Health Index			
	1990	1995	2000	2007	1990	1995	2000	2007
MENA-low	0.42	0.46	0.50	0.55	0.47	0.50	0.54	0.57
MENA-mid	0.59	0.65	0.70	0.75	0.66	0.71	0.74	0.77
MENA-high	0.75	0.79	0.82	0.86	0.73	0.77	0.79	0.82
Africa	0.47	0.5	0.54	0.61	0.42	0.41	0.41	0.44
Asia	0.63	0.68	0.72	0.77	0.65	0.67	0.70	0.73
LAC	0.78	0.82	0.86	0.89	0.72	0.75	0.78	0.81
Oceania	0.91	0.97	1.02	1.02	0.79	0.81	0.83	0.86
Europe	0.91	0.93	0.94	0.96	0.79	0.79	0.80	0.83
N. America	0.96	0.96	0.96	0.97	0.84	0.86	0.88	0.90

Note: Population weighted averages.

Source: UNDP.

Table 6. Growth rates of HDI and its components by region, 1990-2005

Region	HDI	GDP pc	Education	Health
MENA-low	0.16	0.07	0.29	0.20
MENA-mid	0.14	0.04	0.26	0.15
MENA-high	0.08	0.01	0.14	0.10
Africa	0.12	0.01	0.37	0.10
Asia	0.16	0.11	0.24	0.14
LAC	0.09	0.02	0.13	0.11
Oceania	0.08	0.03	0.12	0.10
Europe	0.03	0.01	0.04	0.03
N. America	0.03	0.03	0.00	0.07

Note: Average growth rates over the 15 year period 1990- 2005.

Table 7. Youth ratios in selected Middle Eastern countries and other regions

	1970	1990	2000	2005	2015
Algeria	0.23	0.28	0.31	0.32	0.27
Djibouti	0.27	0.28	0.28	0.29	0.30
Egypt	0.26	0.26	0.28	0.3	0.27
Iran	0.26	0.27	0.33	0.36	0.27
Iraq	0.25	0.28	0.29	0.28	0.29
Jordan	0.27	0.29	0.31	0.30	0.28
Kuwait	0.29	0.28	0.27	0.28	0.23
Libya	0.26	0.29	0.34	0.32	0.24
Morocco	0.23	0.28	0.30	0.30	0.27
Oman	0.27	0.25	0.30	0.30	0.29
Qatar	0.30	0.23	0.23	0.32	0.23
Saudi Arabia	0.26	0.28	0.28	0.28	0.27
Sudan	0.26	0.27	0.28	0.28	0.29
Syria	0.25	0.27	0.31	0.32	0.28
Tunisia	0.23	0.28	0.29	0.30	0.26
Turkey	0.25	0.29	0.30	0.28	0.25
UAE	0.32	0.26	0.30	0.32	0.23
Yemen	0.26	0.26	0.27	0.29	0.30
MENA	0.25	0.27	0.30	0.30	0.27
Africa	0.26	0.27	0.28	0.28	0.28
Asia	0.25	0.29	0.27	0.26	0.25
Europe	0.22	0.22	0.21	0.21	0.18
LAC	0.26	0.28	0.28	0.27	0.25
N. America	0.24	0.23	0.21	0.21	0.2
Oceania	0.25	0.26	0.23	0.22	0.22

Notes: The ratio of youth ages 15-29 to total population.

Source: UN 2008 Population Prospects.

Table 8. Youth unemployment in selected countries, ages 15-29

	Youth	Overall	Youth/ Overall
Algeria	22.3	21.70	1.03
Bahrain	20.1	5.50	3.65
Egypt	24.8	10.16	2.44
Iran	23.0	11.27	2.04
Iraq	--	10.53	--
Jordan	22.2	14.95	1.48
Kuwait	5.3	1.12	4.73
Lebanon	17.4	8.08	2.15
Morocco	18.3	11.07	1.65
Palestine	35.7	23.61	1.51
Qatar	5.4	3.90	1.38
Saudi Arabia	16.3	5.25	3.10
Syria	16.5	8.96	1.84
Tunisia	27.3	14.84	1.84
Turkey	19.6	9.51	2.06
UAE	7.6	2.71	2.80
MENA	25.9	11.14	2.32
Low income	9.9	4.88	2.03
Middle income	19.6	6.58	2.98
High income	13.6	6.68	2.04

Notes: Country classification is based on GDP per capita in 2005 PPP US dollars: Low income: less than \$3000; middle income: \$3000-\$15000; high income: greater than \$15000.

Source: Country groups are from WDI (ages 15-24), average 2000-07; MENA countries from Brookings, MEYI website.

Table 9. The ratio of the government wage bill to GDP (percent)

Country	No. of countries	Ratio	GDP per capita
Algeria		5.82	6815
Bahrain		12.09	25330
Egypt		7.73	4342
Iran		8.98	9077
Jordan		16.35	4212
Morocco		13.19	3515
Oman		8.64	18570
Qatar		6.46	62585
Tunisia		11.19	6296
Turkey		5.53	10429
Income group			
MENA	18	8.38	8518
Low income	57	2.01	1760
Middle income	61	2.02	5623
High income	44	4.30	31715

Source: World Development Indicators, the World Bank 2008.

Table 10. Unemployment rates by education, average 2000-2007

	No. of countries	Primary	Secondary	Tertiary
MENA	15	11.28	15.68	13.67
Low income	27	5.14	7.30	8.94
Middle income	50	10.33	12.90	9.53
High income	42	10.28	6.93	4.48

Note: Population weighted averages. Country classification is based on GDP per capita in 2005 PPP US dollars: Low income less than \$3000; middle income \$3000-\$15000; high income greater than \$15000.

Source: Author's calculation based on World Bank WDI data set.

Table 11. Marriage squeeze: the ratio of men 25-29 to women 20-24

Year	1970	1990	2000	2005	2015	2025
Algeria	0.65	0.87	0.88	0.88	1.08	0.98
Djibouti	0.75	0.81	0.85	0.85	0.92	0.98
Egypt	0.69	0.86	0.78	0.82	1.13	0.93
Iran	0.78	0.86	0.76	0.75	1.32	0.93
Iraq	0.96	0.74	0.88	0.93	0.90	0.99
Jordan	0.96	0.81	0.95	0.92	0.99	1.01
Kuwait	1.47	1.60	2.09	2.00	1.61	1.30
Libya	1.00	0.89	0.88	0.89	1.14	0.95
Morocco	0.73	0.83	0.81	0.77	0.99	1.01
Oman	0.81	1.37	1.37	1.14	1.33	1.26
Qatar	3.33	3.08	2.63	4.50	4.97	3.33
Saudi Arabia	0.96	1.41	1.34	1.40	1.08	1.13
Sudan	0.83	0.84	0.86	0.87	0.89	0.97
MENA	0.78	0.86	0.84	0.86	1.06	0.98
Africa	0.82	0.83	0.81	0.83	0.90	0.89
Asia	0.89	0.92	1.06	0.96	1.09	1.11
Europe	0.86	1.09	1.05	1.02	1.24	1.07
Latin America & Caribbean	0.82	0.89	0.89	0.92	0.97	1.01
N. America	0.82	1.18	1.06	1.01	1.05	1.08
Oceania	0.88	1.01	1.05	0.96	1.00	1.05

Source: UN Population Prospects, 2008 revision.

Table 12. Comparison of MENA enrollment rates with the rest of the world (percent)

	Female				Male			
	MEN A	Lower income	Middle Income	Upper income	MEN A	Lower income	Middle Income	Upper income
Primary	92.4	80.0	92.9	95.5	92.6	84.4	93.6	95.0
Secondary	72.3	31.2	68.1	92.0	77.2	34.7	68.2	91.4
Tertiary	31.7	7.2	29.8	77.1	29.1	10.4	26.8	63.0
Labor force participation	26.4	45.0	61.4	52.7	74.2	81.4	78.7	69.4

Notes: Population weighted averages. Enrollment rates are percent of age group (net). Participation is percent of labor force economically active. Country classification is based on GDP per capita in 2005 PPP US dollars: Low income: less than \$3000; middle income: \$3000-\$15000; high income: greater than \$15000.

Source: World Bank WDI 2008.

Table 13. Gender and education: Average years of schooling for selected MENA and groups of non-MENA countries

	Men			Women		
	1990	1995	2000	1990	1995	2000
Bahrain	8.80	8.90	9.00	9.60	10.10	10.10
Egypt	6.60	7.30	7.70	6.60	6.80	8.10
Iran	7.30	8.20	8.40	6.90	8.20	8.50
Jordan	8.00	8.80	8.90	8.20	8.90	9.80
Morocco	4.90	5.60	6.80	4.30	5.10	6.00
Saudi Arabia	7.10	8.00	8.20	7.00	8.10	9.10
Syria	4.40	4.50	4.80	5.50	5.50	5.80
Turkey	5.30	5.80	5.20	5.70	6.10	7.00
Low income	4.76	5.09	5.45	4.85	5.25	5.71
Middle income	7.97	8.21	8.28	8.23	8.62	9.31
High income	8.98	9.08	9.25	10.32	10.58	10.96

Notes: Population weighted averages. Country classification is based on GDP per capita in 2005 PPP US dollars: Low income: less than \$3000; middle income: \$3000-\$15000; high income: greater than \$15000.

Source: IIASA data set.

Table 14. Gender and life expectancy for MENA and country groups.

	1960	1970	1980	1990	2000	2007
<i>Men and women</i>						
MENA	48.4	54.0	59.7	65.5	69.9	71.8
Low income	42.3	47.9	53.2	56.9	59.3	61.4
Middle income	44.2	61.2	64.6	67.6	70.0	71.6
High income	68.9	70.9	73.4	75.6	77.9	79.4
<i>Women</i>						
MENA	49.3	55.1	61.2	67.5	71.7	73.7
Low income	42.2	48.0	53.7	57.7	60.5	62.7
Middle income	45.7	62.9	66.8	70.0	72.6	74.2
High income	71.8	74.2	77.0	79.2	81.0	82.4
<i>Men</i>						
MENA	47.5	52.9	58.3	63.6	68.1	69.9
Low income	42.4	47.8	52.8	56.1	58.1	60.1
Middle income	42.8	59.5	62.5	65.3	67.6	69.1
High income	66.2	67.7	70.1	72.3	74.9	76.6

Notes: Population weighted averages. Country classification is based on GDP per capita in 2005 PPP US dollars: Low income: less than \$3000; middle income: \$3000-\$15000; high income: greater than \$15000.

Source: World Bank, WDI, 2008.

Table 15. Inequality for selected MENA countries and regions

Country	Gini Coefficient
Algeria	n.a.
Bahrain	n.a.
Djibouti	39.96
Egypt	32.45
Iran	38.28
Iraq	n.a.
Jordan	38.30
Kuwait	n.a.
Lebanon	n.a.
Libya	n.a.
Morocco	40.76
Oman	n.a.
Palestine	n.a.
Qatar	n.a.
Saudi Arabia	n.a.
Sudan	n.a.
Syria	n.a.
Tunisia	40.81
Turkey	42.97
UAE	n.a.
Yemen	37.69
MENA	38.20
Low income	37.57
Middle income	43.56
High income	36.23

Notes: Averages of reported Gini coefficients for 2000-07, population weighted.
Source: World Bank, WDI 2008.

Figures

Figure 1. The HDI index of MENA countries in relation to per capita GDP, 1990-

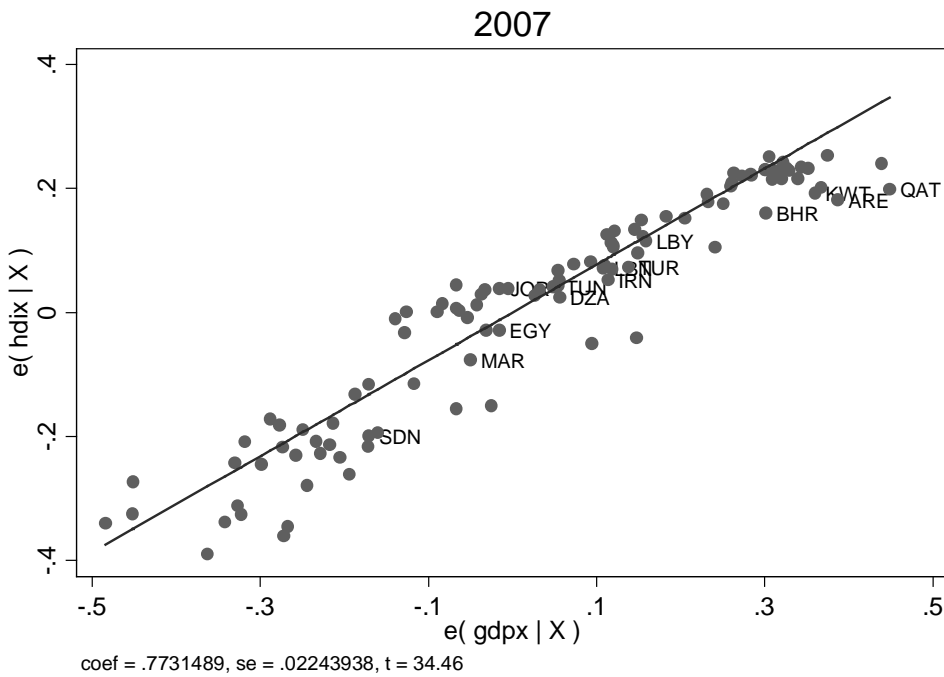
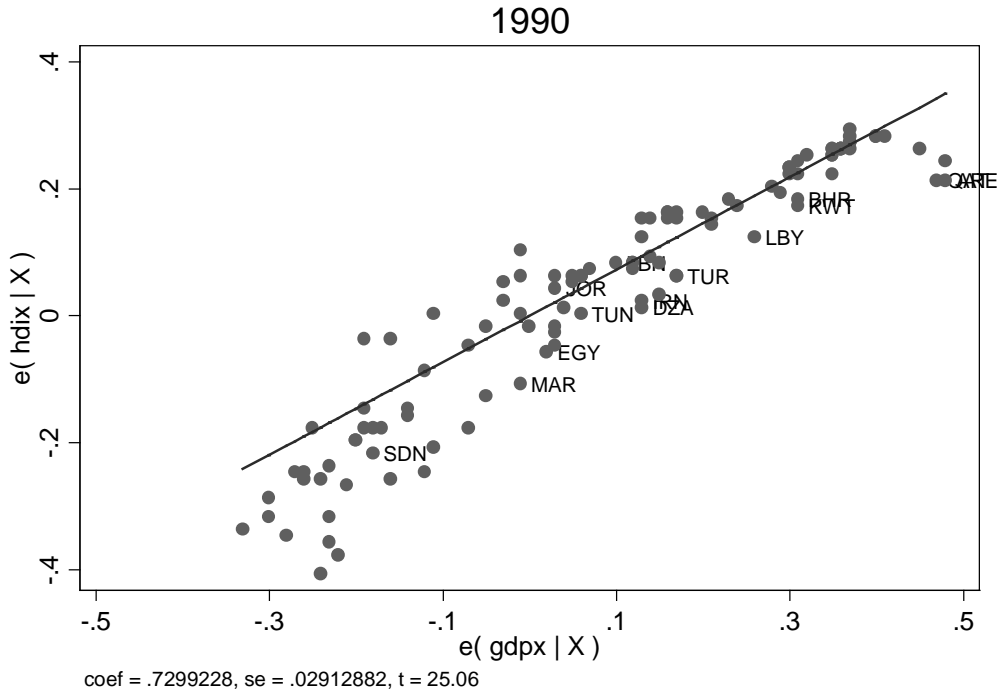


Figure 2. The education index of MENA countries in relation to per capita GDP

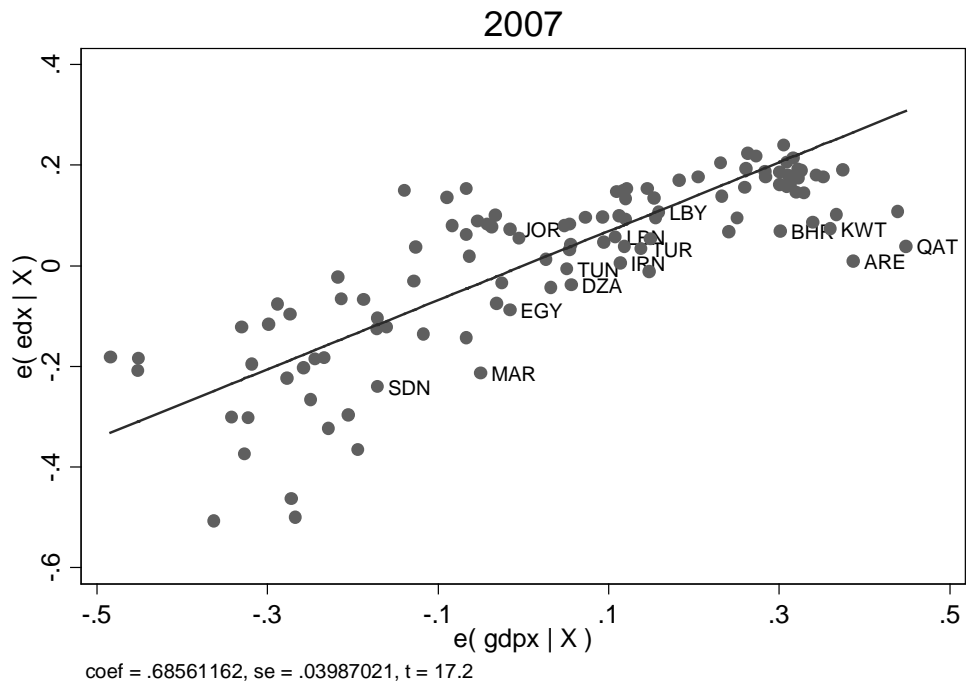
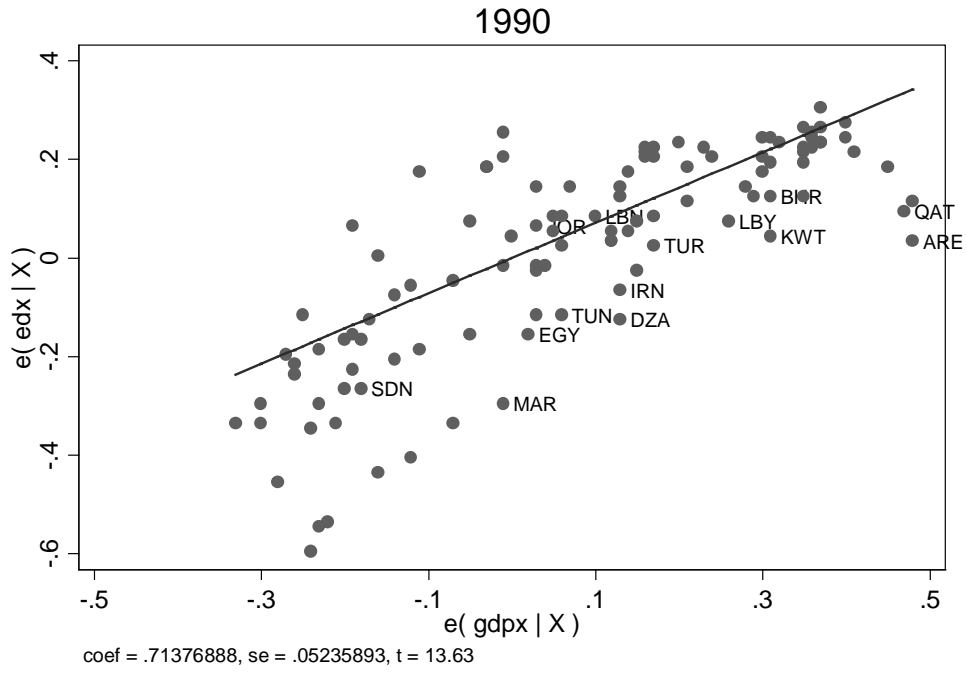


Figure 3. The health index of MENA countries in relation to per capita GDP

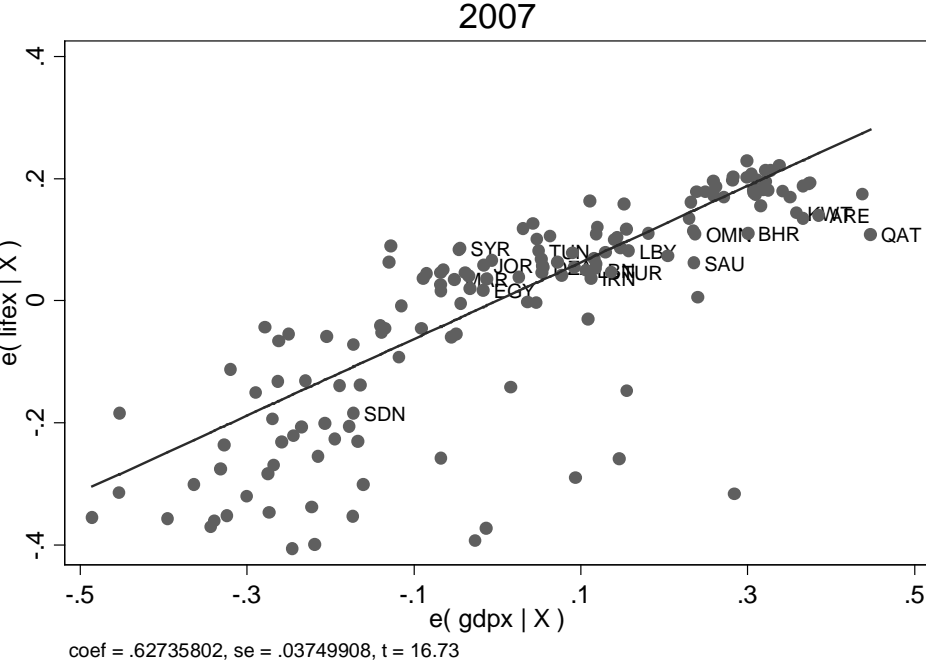
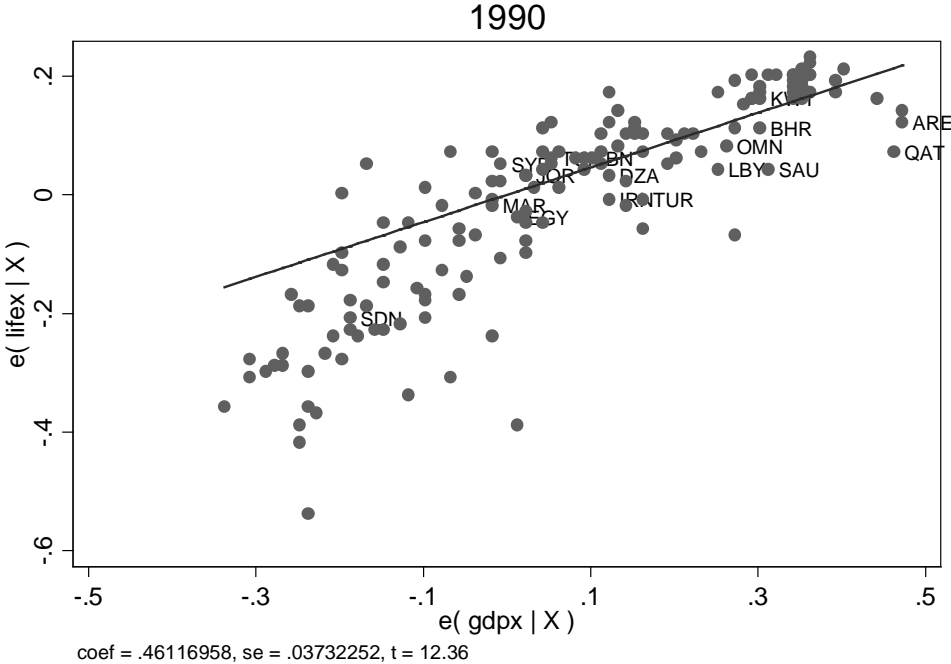
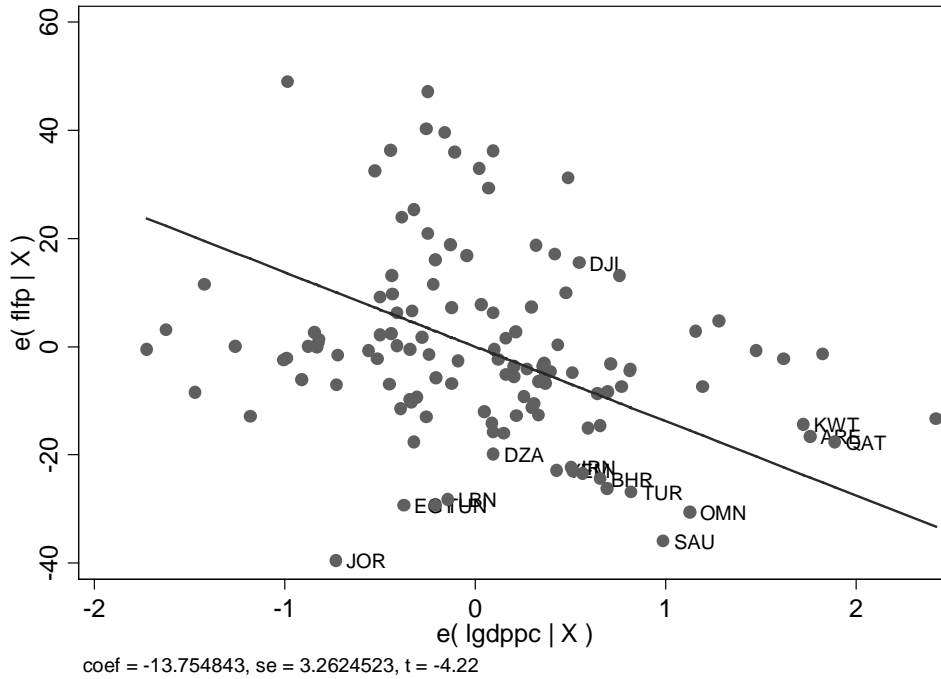
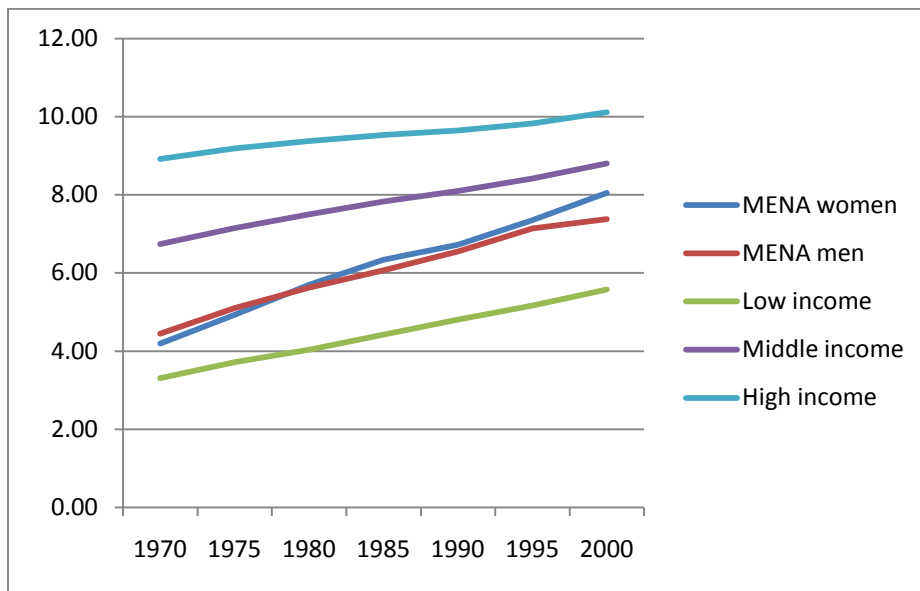


Figure 4. Women's labor force participation



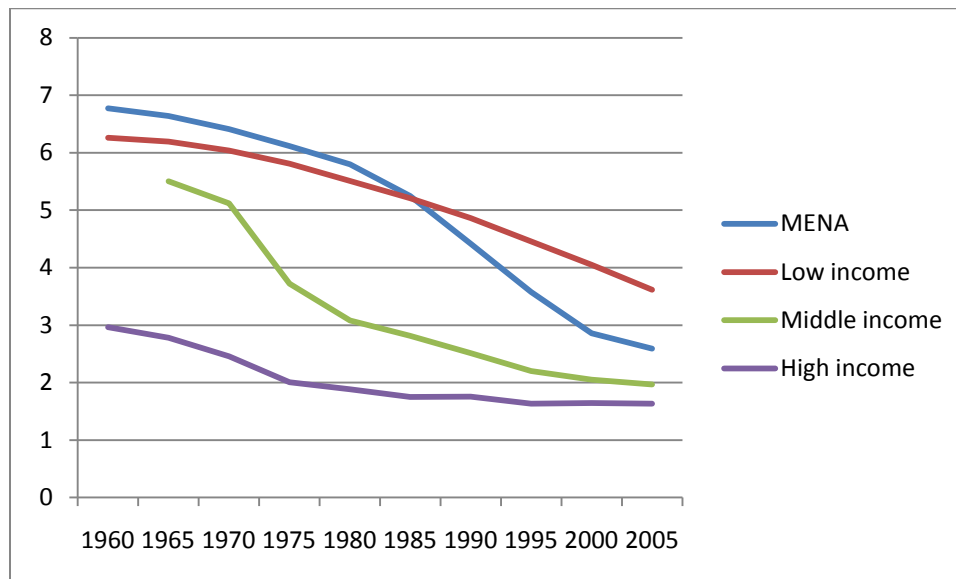
Note: The partial relation between female labor force participation rate and log GDP per capita, controlling for female secondary and tertiary enrollment.

Figure 5. Years of schooling have increased faster in MENA than other regions



Notes: Average years of schooling for both sexes, except for MENA
 Source: IIASA education data base

Figure 6. Total fertility rates



¹ See Table 1 for the list definitions of the categories used in this section. All countries normally considered in the Middle East and North Africa region are included in this study, including Turkey.

² Middle income for non-MENA countries is defined between \$3000-\$15000 GDP per capita values (PPP values for 2005), in which most MENA countries fall. All averages are population weighted. Source of data: World Bank WDI 2008.

³ Regressing on the HDI index of GDP per capita, which is limited from above to 100, produces the same results as regressing on log GDP per capita, so there is no difficulty of interpretation.

⁴ For the effect of cohort size on welfare, see Easterlin (1987).

⁵ The youth ratio for the oil-rich nations includes foreign workers, so this analysis may not apply.

⁶ Averages over a number of years yield data for a larger number of countries.

⁷ The most relevant comparisons in these tables should be made with the group of 62 “middle income countries,” defined for this study with PPP GDP per capita between 3000 and 15000 (this corresponds roughly to the middle income definition that the World Bank uses but based on 2008 GDP pc between \$1000-12,000). The table includes lower income (less than \$3000) and upper income (greater than \$15,000). Primary and secondary enrollment rates are net but tertiary rates are gross (source: WDI database).

⁸ As noted earlier in footnote 2, I define as middle income countries with GDP per capita (in 2005 PPP) in the range \$3000-\$15,000.