

## **We Have Education, Where are the Jobs? Job Creation and Returns to Education in the Arab World**

Joanna Abdel Ahad and Zafiris Tzannatos<sup>1</sup>  
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### **Introduction**

In recent years, solutions to the youth unemployment challenge in the Arab region have focused largely on skills training to bridge the skills gap between, on the one hand, jobs seekers and workers and, on the other hand, the demands of private sector employers. While the Arab region needs education and training reforms to bolster learning outcomes for students on the labor supply side, the region's continuing youth unemployment challenge has to do more with macroeconomic and structural constraints arising from lack of competitiveness and low productivity. These constraints imply that economic growth will not be able fast enough to reduce unemployment, even if the labor force is well qualified. Also employment creation will not be associated with decent, specifically high paying, jobs.<sup>2</sup>

While education can enhance employability, jobs are created by firms, which make hiring decisions on the basis of the profits that the sale of their products and services are expected to realize in the market. Profits, in turn, are determined by the costs incurred by the firm. Wages constitute part of these costs, and the employment of young workers depends on their wages and productivity relative to other workers. In this context, youth have both an advantage and disadvantage compared to adults: They are more educated on average than the adult labor force, but they have less experience. In the end, what matters is not the productivity (and education) of young workers on its own, but their *relative* productivity and wages compared to adult workers. If a young worker were half as productive as an adult worker, he/she would still be employed if his/her wage were less than half of the more productive adult worker.

This discussion makes clear that labor market outcomes depend on many things. However, an examination of how education relates to wages can provide some insights on how labor markets operate and thus guide both education and employment policies for the region's youth.

A common approach to examine this link is by estimating the rate of return to education that is usually expressed as a percentage: For example, a rate of 5 percent means that, on average, an additional year of education results in an increase in wages by that percentage compared to someone without that additional year of education. In other words, the rate of return is indicative of the profitability of investing in education as a way to increase future wages.

This brief presents estimates for returns to education in the Arab world compared with other regions, uses them to analyze the link between education and job creation for the youth, and concludes with policy implications and recommendations.

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<sup>1</sup> Joanna Abdel Ahad is a Research Analyst and Zafiris Tzannatos is a Fellow with the Lebanese Center for Policy Studies.

<sup>2</sup> ILO/UNDP 2012.

## Returns to Education: Regional and Global Perspectives

Economists have calculated estimates of rates of return to education for over 130 countries.<sup>3</sup> For the 22 Arab countries, there are comparable estimates for only 11 countries<sup>4</sup>, and many of these are quite dated due to scarcity of labor force survey data within the region. One statistical source that is available for all Arab countries, as well as more than 130 other countries, is the Gallup World Poll<sup>5</sup>. While not fully suitable for the task in hand, as the polls include information on household incomes instead of individual wages, they can be used for approximating rates of return to education for all 22 Arab countries, and comparable estimates from the rest of the world.<sup>6</sup>

Building on results from the Gallup World Poll, table 1 presents the rates of return to education for Arab countries in the early 2010s, as well as sub-regional groupings within which countries are ranked in increasing order of their estimated rates. Within the region, the combined (female and male) rates are highest in Morocco (11.5%) and lowest in Syria (0.5%), Saudi Arabia (1.5%), Kuwait (2.5%), and Iraq (3%)<sup>7</sup>.

The rates for women are typically higher than they are for their male counterparts. There are three exceptions in the GCC (Bahrain, Saudi Arabia and Oman) and Syria. Figure 1 shows more clearly these gender differences. On average, the female rates of return to education are 10 percent higher than those for men (5.8 percent compared to 5.2 percent).

Table 2 compares results for the Arab region to those in the rest of the world grouped by developing regions. What we see is that the average rate of return to education in the Arab region is below the world average for developing regions and higher only than the average rates in East Europe and Central Asia and South Asia.

Men		Women	
Saudi	2%	Saudi	1%
Kuwait	2%	Kuwait	3%
UAE	3%	Oman	5%
Qatar	5%	UAE	5%
Bahrain	8%	Qatar	5%
Oman	9%	Bahrain	7%
<b>GCC</b>	<b>4.8%</b>	<b>GCC</b>	<b>4.4%</b>
Syria	<b>1%</b>	Syria	<b>0%</b>
Iraq	3%	Iraq	3%
Palestine	4%	Yemen	6%
Yemen	5%	Palestine	7%
Jordan	6%	Jordan	7%
Lebanon	7%	Lebanon	7%
<b>Middle East</b>	<b>4.2%</b>	<b>Middle East</b>	<b>5.1%</b>
Algeria	4%	Tunisia	5%
Tunisia	5%	Algeria	5%
Egypt	5%	Libya	7%
Libya	5%	Egypt	7%
Morocco	10%	Morocco	13%
<b>North Africa</b>	<b>5.9%</b>	<b>North Africa</b>	<b>7.3%</b>
Comoros	5%	Mauritania	5%
Mauritania	5%	Somalia	6%
Sudan	6%	Comoros	7%
Somalia	7%	Sudan	7%
Djibouti	9%	Djibouti	11%
<b>OTHER</b>	<b>6.3%</b>	<b>OTHER</b>	<b>7.1%</b>
<b>All Country Average</b>	<b>5.2%</b>		<b>5.8%</b>

Source: Tzannatos, Diwan and Abdel Ahad (2016)

<sup>3</sup> See Montenegro and Patrinos (2014) for the most recent synthesis of international findings on returns to education.

<sup>4</sup> Montenegro and Patrinos (2014) include rates for Comoros, Djibouti, Iraq, Jordan, Lebanon, Mauritania, Morocco, Syria, Tunisia, the West Bank and Gaza, and Yemen.

<sup>5</sup> Gallup World Poll is a survey of approximately 1,000 civilian, non-institutionalized residents aged 15 and older in each of the 160 countries it covers that represent more than 98 percent of the world's adult population. It records the respondents' personal characteristics (such sex, education, employment, incomes and so on) and asks questions in the respondent's own language on law and order, food and shelter, institutions and infrastructure, jobs, wellbeing and so on.

<sup>6</sup> For the methodology and full set of results, see Tzannatos, Diwan and Abdel Ahad, 2016.

<sup>7</sup> The quoted rates are a simple average of the reported male and female rates that are subject to rounding. For details see Tzannatos, Diwan and Abdel Ahad (2016).

Region	N	Male	Female
High Income	40	5.2%	5.4%
<b>Developing</b>			
East Asia and Pacific	10	6.6%	6.6%
Europe and Central Asia	22	4.9%	5.0%
Latin America and Caribbean	19	6.4%	6.8%
South Asia	7	4.7%	5.5%
Sub-Saharan Africa	35	7.6%	7.8%
Average (developing only)	93	6.4%	6.6%
Arab Countries	22	5.2%	5.8%
Country Average (all)	155	5.9%	6.2%

Source: Tzannatos, Diwan and Abdel Ahad (2016)

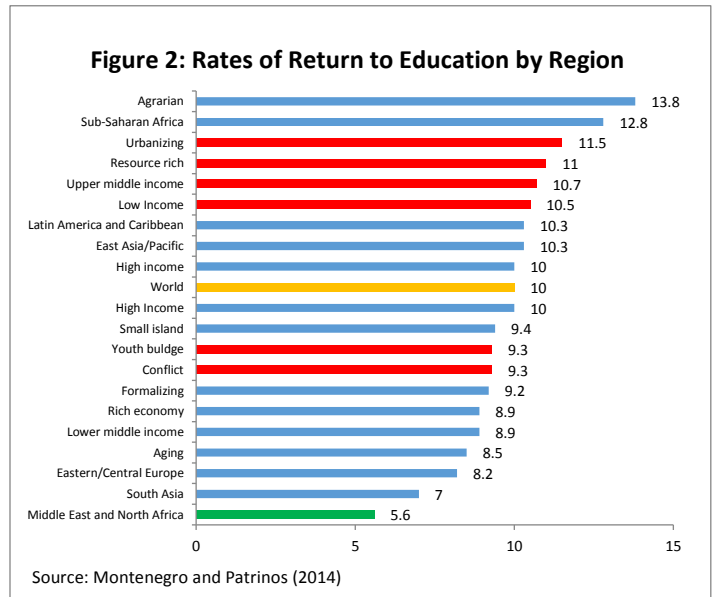
A synthesis of the available estimates across the world is presented in figure 2, which includes groupings that distinguish between different types of economies (e.g., urbanizing, agrarian, resource rich, youth bulge, conflict, etc.). They also cover the whole spectrum of income levels, from low-income countries to high-income countries. Finally, figure 2 provides separate estimates for each world region. Of all these types and combinations of economies and regions, the Arab region has the lowest rates of return to education.

### Interpreting Low Returns to Education in the Arab World

When considering the gender gap favoring women to men in terms of returns to education, it is important to realize that almost all men work. This is not the case for women. Those women who work are, on one hand, poorer women who are typically engaged in low pay occupations and tend to be less educated or, on the other hand, those who are attracted into the labor market by high wages and tend to be more educated. Thus, for men, the rates of return to education measures the effect of education on the earnings of the average man. For women the rate applies to a

rather polarized group of working women and may not be representative of the earnings potential of the average woman. The estimated education premium for women in the Arab region may be inflated further because women are disproportionately employed in the public sector, which typically offers higher pay for fewer weekly working hours than those found in the private sector.

The more interesting question perhaps is why rates of return to education in the Arab region are so low overall. In the case of the GCC, a simple explanation may be that our data cover only national workers and exclude expatriates. Nationals in these countries tend to be employed in the public sector more or less irrespective of their educational attainment, while pay in the public sector is compressed; i.e., the least qualified workers are paid more in the public sector than they would be in the private sector, while wages for the most qualified ones are lower than those of their counterparts in the private sector. Moreover, the impact of education on wages will be small if the quality of education is low if preferential hiring practices in the public sector tempt nationals to pursue low quality education for the sake of credentialism, that is, studying easy to pass subjects or just enough to get the minimum qualifications required to be employed by the government without much regard to actual learning.



In the case of the more diversified Arab economies emigration may be another explanation for the low returns. These economies have among the highest skilled emigration rates in the world.<sup>8</sup> One can reasonably assume that those who emigrate are those who would have enjoyed the highest returns to education had they stayed in their home countries. Their departure arithmetically depresses the overall rates of return to education at home. Other than the above explanations, we know little whether the low returns to education in the region are the result of factors underlying labor supply or labor demand. This is explained below.

On the labor supply side, there may be too many educated job seekers chasing too few jobs. This would depress wages and erode their advantage over less educated workers. Also, educated job seekers may be bringing into the market low quality education or education that is irrelevant to the needs of employers. Towards this end, we do know that learning outcomes in most Arab education systems are low.<sup>9</sup> Since 1999, an increasing number of regional countries have participated in internationally comparable tests measuring the scholastic performance of their students. A simple count by the authors of the results reported in assessments like the Programme for International Student Assessment (PISA), Trends in International Mathematics and Science Study (TIMSS), and Progress in International Reading Literacy Study (PIRLS) produced an average score for Arab students that is 33 percent lower than that found in top-performing countries, with some of the lowest results coming from the GCC countries.<sup>10</sup>

On the labor demand side, employers may be using low capital intensive technologies because labor supply is abundant and they can therefore pay low wages, or because they are cushioned from competition through protectionism or, in some cases, corruption. This means that firms can secure profits by supplying relatively low quality goods and services without the pressure of having to pay high wages to skilled workers and thus to increase productivity.

To some extent, these explanations are circular. For example, if the economy is not competitive for reasons such as protection or cronyism, productivity and, by extension, wages will be low. In turn, workers will not invest in *quality* education as the cost of acquiring it is not sufficiently compensated by higher future wages. This is the demand side story. Alternatively, if the quality of education is poor and its relevance to employers' needs is low, productivity will be low and so will be wages. This is the labor supply story. Evidence of this circularity has so far been largely unanswered in the Arab region due to a lack of data, mainly on the labor demand side.

### **Policy Implications**

There is no question that education outcomes in many Arab countries can and should be increased. Measures can address issues such as curriculum content that is dominated by soft subjects; learning methods that favor rote learning over critical thinking; books that may be outdated or not readily available at the beginning of the year; teachers who might lack motivation being civil servants; public budget depleted by salaries thus leaving little to pay for consumables and capital investments in education.

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<sup>8</sup> World Bank, 2008.

<sup>9</sup> See Salehi-Isfahani et al., 2012, for the overall low performance of Arab students and also the role of inequality in the region that impacts particularly hard on those from less privileged backgrounds.

<sup>10</sup> Countries within the Arab region that have participated in at least one of these surveys include Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia and the UAE.

However, recent research suggests that while some of these factors might have been critical for employment outcomes in the past, they are probably less so today.<sup>11</sup> Future policies should steer more towards the labor demand side as the impact of the relevance and quality of education depends critically on the characteristics and structure of the economy: Lack of jobs, especially decent ones, and unemployment are mainly macroeconomic issues.

Understanding these issues requires going beyond education and the labor market itself. We must also better understand the larger context of how Arab economies operate, especially with respect to the role of governments, the level of competition and the technical requirements of production. Some Arab countries remain “rentier economies” characterized by favoritism and lack of transparency favoring the establishment’s elites rather than “productive economies” fostering healthy competition that would empower employers and workers to reach their full potential<sup>12</sup>.

In this context, policies to improve youth employment outcomes should start outside the labor market. Fiscal, trade, industrial, monetary, investment, and business development policies should aim at accelerating economic growth. This can be achieved by creating a level playing field for competition that would benefit impartially all economic agents, consumers and producers, employers and workers, instead of continuing to reward rent-seeking behavior. Such policy coherence, based on maximizing long-term social benefits for all instead of enabling short-term profiteering by a few, would lead to better outcomes for all, youth and adults.

In conclusion, the Arab region does not seem to be capitalizing on investments in education to the same extent as other regions have done<sup>13</sup>. Though there are problems with the quality of the education output, the economies still are not sufficiently competitive and modernized to put educated youth to productive use. Unless demand-side market issues are effectively addressed, young people in the Arab world will continue to face mounting challenges in the labor market, especially in the context of pressures arising from globalization and the compounding of these pressures by the ongoing population and labor dislocation in the region.

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#### About Silatech

Silatech is a regional social initiative that works to connecting Arab youth to jobs and expand economic opportunities. The organization promotes large-scale job creation, entrepreneurship, access to capital and markets, and the participation and engagement of young people in economic and social development. Since being founded in 2008, Silatech has financed over 120,000 youth-owned businesses, created or sustained over 200,000 jobs. Silatech currently has programs in 16 Arab countries, including Algeria, Egypt, Comoros, Iraq, Jordan, Lebanon, Oman, Morocco, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia and Yemen. For more information, please visit [www.silatech.com](http://www.silatech.com).

<sup>11</sup> Al-Nashif and Tzannatos, 2013.

<sup>12</sup> Al-Razzaz (2013).

<sup>13</sup> World Bank (2008).