Will Egypt be on time for catching the window of opportunity? Egypt's Future Human Capital by Education and Occupation, 2006-2051

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The present situation related to human capital in Egypt is characterized by three main dimensions. The first is extensive investments in education with little returns in terms of a qualified labor force: according to the 2006 census about 44% of the working-age population was very low qualified (less than primary), especially women (51%), which explains their low participation in the qualified labor force: only 16% of the 15 year and above female population is employed. The second dimension is the high rate of population growth: The rate of natural increase is almost 2 percent in 2008 (PRB 2009). Fertility has been slowly but steadily declining to 3.0 children in 2008 (DHS 2008), a total fertility rate (TFR) slightly below those measured in the 2003 and 2005 DHS surveys. This will bring many more years of population increase in the future. As a consequence, the so-called demographic window of opportunity will be relatively flat and long stretched. This window results from a low total dependency ratio which implies large working-age populations that can contribute to the economy. However, the contribution of the working-age population will only happen if it has the qualifications to realize the development goals. High population growth will create increasing pressure on the education system to provide quality education for all and on the labor market to create jobs that are able to absorb both the increases in the levels of qualifications and the numbers of young entrants to the work force. The third dimension has to do with the capacity of the economy to create the job opportunities needed to utilize the growing working-age population. The levels of unemployment have been very high since the 1980s, fluctuating between 10 percent and 15 percent. This brings many worries for Egypt within the context of increasing the size of the labor force and meeting the changing needs of its rapidly growing young population (Assaad and Roudi-Fahimi 2007)

In this context we base our analysis on work done by Goujon *et al.* (2007) that looked at the future human capital until 2051 for the whole of Egypt and for the governorates, based on the 1996 census population data and 2005 DHS fertility data. We update this work with the newest data from the 2006 population census data and the 2008 DHS data for the whole of Egypt. By comparing past (from Goujon *et al.* 2007) and present trend education scenarios based on retrospective analysis, we will evaluate if Egypt is more likely to achieve its national targets in terms of fertility reduction and increases in schooling levels. Part of the problem of low education in the population is a result of the momentum of education spread throughout the total population and the population and education scenarios show the different degrees of education momentum.

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Furthermore, we will look at the skills of the Egyptian workers and determine whether economic structural change scenarios as suggested by UNDP (2005) to develop the growth sectors such as manufacturing, commerce, services, information and communication technology, and tourism in order to accelerate the growth in employment for the expanding skilled population and the remaining unskilled population are plausible based on the trend observed between 1996 and 2006 in terms of population growth, education levels and changes in the skills of the labor force.

Methodology

The multi-state population projections are conducted using the PDE Population Projection Software (© IIASA). We subdivide the Egyptian population into 5 distinct groups according to educational status (illiterate, read and write, basic Education, secondary, tertiary). The other parameters for this model are: Fertility by educational status; number of international migrants by age, sex, and educational status; and mortality by age and sex. Furthermore we develop some scenarios of the distribution of the population in working age group by level of education, sex, age, and main occupation (Agriculture and Hunting, Manufacturing…).

Data on the population by age, sex, and education for the base year are extracted from the results of the 2006 Egypt census; data on the age-specific fertility rates by education for the base year are estimated from the DHS 2008, data on mortality by age and sex are taken from vital statistics and from DHS 2008, and data on international migration are estimated based on the UN estimation and the CAPMAS 2006 estimation. The distribution of the population in working age group by level of education, sex, age, and main occupation is extracted from the 2006 census.

Short Bibliography

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