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Demography in the Middle East: Population Growth Slowing, Women's Situation Unresolved

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Fifty years of rapid population growth in the Middle East is coming to an end. The Middle East is experiencing the same "demographic transition" to slow population growth that other areas have gone through. The immediate reason for the slower population growth is a fall in the number of children born to the average woman over her lifespan, known as the "total fertility rate" (TFR). While contraception availability and urbanization played a part in the declining TFR, the main factor was the empowerment of women. In recent decades, Middle Eastern women have made great progress at gaining more equal access to education, but that has not yet translated into more access to employment outside the home. The demographic transition through which the Middle East is passing presents an opportunity that is also a challenge. The opportunity is several decades in which the economy faces a relatively light burden in caring for children and the elderly. However, the Middle East can only take advantage of this opportunity if it can create enough jobs for the young people born during the years of rapid population growth. If jobs are not created in sufficient numbers to absorb those joining the labor market, the resulting rise in unemployment could have a considerable political impact. Meanwhile, within a few decades, the Middle East is expected to experience a rapid increase in the elderly population, which by 2050 will exceed the number of children in many of the region's countries.

In the Middle East, as in much of the world, the demographic story of the past 50 years was rapid population growth, which placed a heavy burden on economies. Yet that is coming to an end, in no small part because of social changes, especially the modest progress toward women's empowerment. The Middle East is now making a "demographic transition" that offers the prospect of twin "demographic dividends" if governments can create the right environment -- first the opportunity from much of the population being of working age with a low burden for caring for the youth and elderly; then, in coming decades, the opportunity of increased capital from the savings of middle-aged workers preparing for retirement. Yet these opportunities could turn into dangers if insufficient jobs are

created for the youth flooding into the labor markets and if not enough is saved for what will within a few decades be a rapidly growing population of the elderly. Central to both challenges will be how women's social role evolves, especially women's employment opportunities outside the home.

Slowing Population Growth

From 1950 to 2000, the Middle East experienced explosive population growth. The region's population grew from 92 million to 349 million, a 3.8 fold increase, or 2.7 percent a year. All of the countries in the region had much the same experience; consider that Israel grew at 3.2 percent a year, Iran at just over 2.7 percent, and the Arab countries at just under 2.7 percent. For most countries, the reason for this increase was a sharp decline in death rates: infant and maternal care improved, the physician/population ratio rose briskly, and so did the hospital-beds/population ratio. For Israel, Libya, and the Gulf monarchies, immigration was another important factor.

Indeed, the large number of resident non-citizens in Libya and the Gulf monarchies complicates interpretation of population figures in various ways. First, trying to minimize the importance of foreign residents leads some governments to exaggerate the number of their citizens; the most careful study of Saudi Arabia's 1970 citizen population suggest it was only 60 percent of the figure reported in the usual international statistics (which are those used here), and there is every reason to think that discrepancy remains. Another peculiar aspect of the non-citizen populations is that they are so overwhelmingly male -- which obviously affects the birth rate, calculated as a percent of the country's population. The sex ratio in the United Arab Emirates, for example, is 67 percent male.

Policymakers and the general public are only slowly realizing that the Middle East's long population boom is coming to an end. The Middle East is experiencing the same "demographic transition" to slow growth that hit Europe and North America a few generations ago, and Asia and Latin America in the last generation. In some countries, the change has been particularly dramatic. In Iran, the number of births has already dropped to half of the 1980s peak; 2,259,000 total births were registered in 1986/1987, while 2004/2005 had only 962,000.

In other countries, the demographic transition has not yet begun. In particular, in Yemen and the Palestinian-ruled territories, the UN projects that population growth rates for 2000-2050 will be about the same as they were for the 1950-2000 period, which is almost certainly incorrect: The experience of the rest of the Middle East and the rest of the world strongly suggests that eventually these areas too will experience a demographic transition. Estimates for the annual population growth rate for the Middle East as a whole from 2000 to 2050 are 1.3 percent, or less than half of the 1950-2000 level. From 2000 to 2050, estimates show the region's population will not quite double, compared to the almost four-fold increase from 1950 to 2000. Further, the growth rate is continuing to drop; in the 2020-2050 period, it is expected to be 0.6 percent a year.

The immediate reason for the slower population growth is a fall in the number of children born to the average woman over her lifespan, which is called the "total fertility rate" (TFR). For the World Bank's Middle East and North Africa region (which excludes Sudan and Israel), the average TFR fell from 6.2 in 1980 to 3.2 in 2000. TFRs are falling across the Middle East; for instance, in Egypt, the TFR dropped from 7.1 in 1960 to 3.5 in 2000. When demographers explain why the TFR declined in Europe or developing Asia or Latin America, they make reference to a host of factors absent in the contemporary Middle East, such as the declining influence of conservative religious views or industrial take-off. The breadth and depth of the demographic revolution in the Middle East has therefore been a surprise.

Increased availability of contraception played a role but seems to have speeded along process that was occurring anyway. Contraception prevalence rose sharply in much of the region in the 1980s and 1990s. In Egypt, with ample funding from U.S. aid and an effective government effort, the rate rose from 30 percent of married women in 1984 to 57 percent in 2000. Over the same period in Algeria, the rate went from 7 percent to 64 percent. Besides

contraception, another factor contributing to the falling TFR was urbanization. Whereas child labor on the farm is an economic boom, children are easy to watch over while working, and housing is not a particular burden, all this is reversed in urban settings: children often cannot help in urban jobs, they often require daycare arrangements, and larger apartments are a real economic burden.

Still, statistical analysis shows that the main factor behind the decline in TFR was empowerment of women, discussed in more detail below. Rising female education rates are closely associated with declining fertility; for instance, a study of Oman in 1995 found illiterate women's TFR was 8.6 but women with secondary education had a 3.8 TFR.

While TFRs have become much lower, the number of women in the childbearing years remains high, and so the population growth rate is falling more slowly than is the TFR. Moreover, even as the population growth rate falls, the absolute number of people being added to the population stays high. From 2000 to 2050, the Middle East's population is estimated to increase by 329 million people (from 349 million to 678 million), actually more than the 258 million increase in population from 1950 to 2000. Yet by 2050, the absolute size of the annual increase in the population is expected to slow to a crawl.

When the population was growing quickly, the number of children was skyrocketing, but there were few more elderly. From 1950 to 2000, the number of children under 15 in the Middle East grew by 92 million. About one-third of the region's population increase was children under 15, while only one-twentieth was elderly over 60. Yet as population growth slows, the composition of the population changes to fewer children and more elderly. From 2000 to 2050, the proportions in the population growth will likely reverse: one-third will be elderly and one-twentieth will be children. Indeed, after 2020, the number of children in the Middle East is expected to fall slowly, with considerable social implications; for instance, schools will need fewer teachers. This process is already very noticeable in some countries; for instance, in Iran, the number of children under 15 in 1990 was 25.3 million while in 2010 it will be only 18.7 million.

In contrast to what is happening to the number of children, from 2000 to 2050, the number of elderly over 60 in the Middle East is expected to skyrocket by 107 million, rising six-fold from 21 million to 127 million. By 2050, the number of Middle Easterners over 60 will almost equal the number under 15 (127 million compared to 143 million). Indeed, in 2050, the population over 60 will be greater than that under 15 in 12 of the region's 20 countries -- 45 percent greater in Iran.

In short, the Middle East is leaving behind the population explosion and entering a new demographic era in which youth are much less important and the elderly much more a factor.

The Twin Challenges: Youth Unemployment and Preparing for Retirement

The demographic transition through which the Middle East is passing presents an opportunity that is also a challenge. The opportunity is several decades in which the economy faces a relatively light burden in caring for children and the elderly. To capture the combined cost of caring for the young and the old, demographers calculate the dependency ratio, that is, the ratio of those under 15 or over 60 to those 15-60. During the height of the Middle East's population explosion from 1960 to 1980, the dependency ratio was about 1.0, that is, one dependent per working-age person. As the births drop off but the numbers of elderly are still small, the ratio is falling; it was 0.75 in 2000 and is expected to bottom out at 0.58 in 2030. Then, as the numbers of elderly begin to increase, the dependency ratio will rise again, reaching 0.66 in 2050 (forecasting out much further than that becomes quite speculative). Yet especially in the period from 2010-2040, when the dependency ratio ranges from 0.58 to 0.63, the Middle East will have a light burden in caring for the young and old. This could be a golden period for economic

growth -- what demographers refer to as the "demographic dividend."

However, the Middle East can only take advantage of this opportunity if it can create enough jobs for the young people born during the years of rapid population growth. That will not be easy. Most countries in the region have become locked into a pattern of relying on government and state-owned firms to create jobs as a safety valve, not because of any need for additional employees. Indeed, when private sector growth stagnated in the 1990s, the share of the labor force employed in the public sector increased in many countries.

A destructive cycle has set in whereby young people are prepared to wait unemployed for years in hopes of securing a public sector job at higher wages and more security than available in private firms; in response to students' dreams of public sector jobs, the education system has become oriented to preparing bureaucrats rather than providing the skills needed by the private sector, with the result being that private employers place little value on education credentials and so offer graduates lower wages than they feel they deserve. The upshot is substantial youth unemployment, pressure on governments to hire people needlessly, youth with training inappropriate for the needs of the labor market, and private firms unable to find locals with adequate skills for the high wages they expect. This problem occurs across the region outside Israel, not just in oil-rich countries but also in such poor countries as Egypt.

While Middle East data on unemployment are notoriously unreliable, there are certainly more than six million unemployed youth across the region -- not counting the millions more who barely earn any income at some activity such as peddling, which they do as much to avoid the social stigma of being unemployed as for the money it brings.

If existing policies are maintained, Middle Eastern countries are not likely to be able to create sufficient jobs to absorb those entering the job market over the next decades, and unemployment will grow. Only under the most optimistic scenarios about high oil prices would the oil-rich countries have sufficient resources to create government jobs for the young people looking for their first positions, and it would be even more optimistic to think that the spill-over from the oil-rich countries to other Middle Eastern states would provide the governments in those countries the resources they would need to fund a similar expansion in public employment.

If productive jobs -- not simply make-work public jobs -- are to be created, substantial amounts of capital will be needed: labor can only be used effectively if combined with other factors of production. Under favorable assumptions -- including a modest number of jobs required and efficient use of capital -- Middle Eastern countries would still need to have investment equal to 28 percent of national income. That is about ten percentage points more than Middle Eastern countries are currently investing. To attract that kind of capital would require changes in policies to make the business environment more attractive and to encourage foreign investment (or at least to persuade locals to invest at home rather than placing their funds abroad). On the bright side, if Middle Eastern countries were able to make that kind of investment, the additional capital along with the extra labor would be sufficient to produce a real GDP growth rate of 5.4 to 5.7 percent a year.

Another approach to providing youth with jobs would be to displace foreign labor in the nine countries, out of 20 in the region, where the number of foreign workers exceeds the number of unemployed. The countries concerned are not only Libya and the six oil-rich Gulf monarchies, but also Jordan and Israel, which have become dependent on foreign labor for low-wage jobs nationals refuse to do at the wages offered. The governments in each of these nine countries have periodically campaigned to replace foreign workers with locals, but the politest way to describe these efforts is ineffectual.

A particularly striking example was when political problems in the mid-1990s prevented Palestinian workers from coming to jobs in Israel, at a time when Israel had substantial unemployment among the recently arrived immigrants from the former Soviet Union. Rather than developing policies to promote use of local laborers in low-paid jobs --

such as tax rebates or open subsidies to employers and workers alike, or programs to upgrade the skills required for these jobs so that better wages could be paid -- Israel turned a blind eye to employers hiring tens and tens of thousands of foreign workers, from Asia, Africa, and eastern Europe. Further, this was in a country with a strong trade union movement and a proud tradition of encouraging locals to do manual work to build the nation.

Encouraging locals to do manual labor or service jobs will be even harder in many Arab countries where such work is looked down on. In addition, private firms in these countries have a long history of resisting employment of locals who are seen as much more trouble than they are worth. The solution which would seem obvious to outsiders -- solve the unemployment problem by displacing foreign workers -- would not be easy to implement. If jobs are not created in sufficient numbers to absorb those joining the labor market, the resulting rise in unemployment could have a considerable political impact. As Pack and Noland explain, research on what determines happiness suggest that employment is an extremely important factor, independent of income. While extended family networks allow young people to disguise their unemployment for years by living with their parents and pretending that they are gainfully occupied at something, which in fact does not take much of their time, the reality of their limited prospects weighs heavily on young Middle Easterners. Iran has seen a wave of unemployed youth turning to anti-social behavior, especially drug addiction and prostitution. Political extremists from Algeria to Palestine and Iraq have been able to recruit readily among young people who face a bleak future.

The labor market situation in the Middle East will likely undergo a dramatic change by mid-century when the working age population will largely stop growing. In six of the region's 20 countries, the population aged 15-60 will actually shrink between 2040 and 2050 -- in Iran, it will shrink nine percent in that decade. By that decade, the working age population will only be increasing in the countries in which the demographic transition started late: Sudan, Iraq, and especially the Palestinian territories and Yemen. At just the same time that the working age population ceases to grow much, the numbers of elderly will begin to soar, as discussed earlier.

The steady working age population combined with the increasing numbers of elderly will combine to produce a sharp decrease in the ratio of working age people per elderly, which is the key determinant of how much a burden society faces for financing retirement. For the Middle East as a whole, the ratio of working age population to the elderly has been around nine since 1950, reaching a peak of 9.6 in 2000. Yet the ratio is expected to begin to decline precipitously after 2010, plunging to 3.2 in 2050. Iran will face the most acute problem, going from 9.2 people of working age for each person over 60 in 2000 to only 2.2 in 2050 (Israel will have only 2.3, but it has long had proportionately more elderly -- the ratio was 4.4 in 2000 -- so it is well on the path to adjusting by encouraging later retirement and more savings).

Note that these figures all relate to population of working age, not to actual workers. In particular, if current patterns persist in which only 30 percent of women work outside the home and factoring in the usual non-working people aged 15-60 (e.g., students, unemployed, and disabled), then the number of active workers may be only half the number of people aged 15-60. That would mean that for each person over 60, the Middle East on average would have 1.6 active workers -- and Iran would have 1.1. That would be an unsustainable burden for the region's pay-as-you-go retirement systems, which rely on the contributions of those now working to fund the payments made to the retired.

The challenge of paying for retirement could be an opportunity -- what is referred to as a second "demographic dividend" when the middle-aged save for their retirement, because those savings could fund investment that raises national income. That, however, would require policies which encourage financial savings, such as reliable banks (as distinct from government-owned bureaucratic dinosaurs, which treat customers badly), attractive interest rates, well-regulated insurance firms, and bond markets.

On the whole, Middle East financial systems leave much to be desired. While in many ways a developed economy, Israel has a weak financial system in which a handful of institutions dominate the banks, stock markets, and

insurance firms. Several Gulf monarchies have vigorous stock markets, but they have been subject to speculative waves, with strong public pressure to rescue local investors when bubbles burst. The \$90 billion public bailout of Kuwaiti investors after the 1982 stock market crash created the impression that stock markets are as much an instrument for distribution of government largesse as a place in which capital is raised for productive purposes. Given the sad history of the region's financial systems, it will be a challenge to persuade locals to hand over the savings from which they expect to fund their retirement. While any estimate is uncertain, it seems plausible that Middle Easterners have put several hundred billion dollars in international financial markets rather than at home -- and that is on top of the well over a trillion dollars Gulf governments have invested in those markets, mostly from secretive "future generation" funds designed to supplement income if oil receipts fall.

Women's Economic Role

In recent decades, Middle East women have made great progress at gaining more equal access to education, but that has not yet translated into more access to employment outside the home. What happens to women's employment status will do much to influence how the region develops.

Throughout the region (with the exception of the poorest countries, Yemen and Sudan), girls as well as boys have nearly universal access to primary education; in 2000, female primary school enrollment was 90 percent of the school-age children in the World Bank's Middle East and North Africa region (which excludes Sudan and Israel). Access to secondary education has sharply increased in recent decades in that region for both boys and girls: enrollment rates in 1980 were 52 percent of boys and 32 percent of girls, whereas in 2000, the rates were 77 percent of boys and 73 percent of girls. In the oil-rich states -- including those with strict Islamic rules, such as Saudi Arabia and Iran -- women now make up half or more of the undergraduate university students. Indeed, the increasing dominance of universities by women is becoming a matter of social concern; it appears that young men have better work opportunities and so do not stay in school as long. Kuwait University has introduced a formal affirmative action program to attract more male students.

Women's increased skills, combined with the urbanization that the Middle East has been experiencing, would be expected to lead to more women working outside the home. However, to date, women's labor force participation has lagged behind trends in much of the rest of the world. In East Asia and sub-Saharan Africa, women's labor force participation has for decades been at 60 percent or more. By contrast, the proportion of working-age women in the labor force grew only modestly in the World Bank's Middle East and North Africa region from 22 percent in 1960 to 26 percent in 1990. The rate rose to 32 percent in 2000, with particularly steep increases in the Gulf monarchies.

One way to read these data are that the Middle East is going down the same route as Latin America, where women's labor force participation went from 26 percent in 1970 to 32 percent in 1980, 40 percent in 1990, and 44 percent in 2000. In other words, it is possible that as they increasingly graduate from high school and university, more and more Middle East women will seek to work outside the home. Yet for that to happen, women will have to make a breakthrough in employment in private, urban firms; so far, Middle East women's employment has been much higher in the public sector and in agriculture than in the private, urban firms.

Certainly part of the problem is the legal barriers and restrictions women face in many countries. Another disincentive to women's work is discrimination in pay. The World Bank calculates that in its Middle East and North Africa region, the average women's wage would go up 32 percent if discrimination were eliminated (women make on average 73 percent of what men make, but part of the difference is due to lower education and experience). While some have argued that privatization and other economic reform programs have also hurt women's efforts to find work, there is scant evidence to back this up. The single most important factor explaining the low level of women's employment in the region is cultural attitudes, such as the code of modesty restricting interactions between men and women, the centrality of the family rather than the individual, and the common assumption that the man is the

family's sole breadwinner.

If women increasingly seek to join the labor force in the next few decades, that will add to the pressures of creating sufficient jobs for the youth bulge. For instance, an increase over the next decade in women's labor force participation rate by ten percentage points -- which would still leave Middle East women well below the average in other developing countries -- would almost double the number of job-seekers being added to the labor force. To create anything like that number of jobs would require far-reaching reforms across the region: attracting foreign financing, reducing the bureaucratic burden on entrepreneurs, and, in many countries, displacing foreign workers. On the other hand, if the women graduating in increasing numbers from the region's universities are left with poor or no employment opportunities, that would be a great waste of valuable resources -- as well as potentially a source of serious social if not political tension.

While employing women could be a serious challenge in the next few decades, women's employment could become a savior by mid-century as the number of youth fall off at the same time that the elderly population begins to soar. Having a pool of women to add to the work force could do much to meet the challenge of funding retirement for the rapidly increasing elderly population. In other words, the economic pressures for bringing women in the labor force will grow as the population ages.

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