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**Macroeconomic Aspects of the New Demography
in the Middle East and North Africa**

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Abstract

Although population growth rates in MENA are on a sustainable downward trajectory, the age structure is rapidly changing in favor of those of working-age. Young and unmarried adults seeking work and housing are increasing in numbers, a trend that is likely to intensify in the next two decades. These young cohorts provide an opportunity for invigorating economic performance through rapid accumulation and faster growth. But the mechanics of the demographic transition require well-functioning markets and institutions where a sustained policy effort is needed. If the slow pace of job creation persists and the private sector remains a marginal player, unemployment will rise fueling social and political tensions. Given its aging population, Europe stands to gain in the long-run from the rising numbers of working age adults in MENA. While the gates into Europe remain closed to emigration from MENA, the EU should support initiatives aimed at channeling investment and creating jobs in the region.

Introduction

The populations of the Middle East and North Africa (MENA) have grown very rapidly in the Post-WWII period, faster than all regions in the world except Sub-Saharan Africa.¹ This demographic explosion went hand in hand with an expanded labor force, increased urbanization and rural-urban migration, and a rising gap in food self-sufficiency. Yet, for much of the post-independence era rapid population growth was of little concern to policy makers in the region. MENA's economies were undergoing rapid structural transformation and GDP growth performance was above the average of developing countries. Moreover, the state expanded its role as employer and consumer, and the oil boom stimulated substantial flows of labor and capital within the region.

With the collapse of the regional economy in the aftermath of the oil bust in the mid-1980s and the Gulf War in 1990, economic growth deteriorated, real wages fell, and unemployment rates rose to double-digit levels in several MENA countries. Notwithstanding successful stabilization and progress in trade reform and financial liberalization, structural adjustment has been patchy and slow, and the dominance of the public sector persists throughout the region. Meanwhile, growth performance has been sluggish and the private sector has yet to become an engine of economic transformation. In the context of labor markets, MENA remains burdened by high rates of unemployment and a slow pace of job creation, partly the result of distortions in the labor market and the legacy of the state as the main employer in urban centers.

¹ Unless otherwise stated, quantitative indicators for MENA, while applying to the entire region, will be based on the following sample of 8 countries: Algeria, Egypt, Iran, Jordan, Lebanon, Morocco, Syria and Tunisia.

With the long-awaited fall in fertility beginning to take effect since the early 1990s, population growth rates are projected to decelerate, averaging around 2 percent between now and 2015 for the entire region. More important than the population growth rate itself is the changing age structure of MENA's populations, which is undergoing rapid change with important macroeconomic implications. Whereas the age structure in the past was dominated by the very young (ages 0-14), the balance is gradually shifting in favor of working age adults (ages 15-64) whose share in the population will steadily rise. *As a consequence, labor markets in MENA will have to cope with a rising tide of first-time job seekers on top of those already unemployed and seeking work* (Table 1).²

Accordingly, the challenge of accelerating economic growth through rapid accumulation and enhanced efficiency would have to confront the need to absorb large numbers of workers in jobs that ensure sustained increases in real wages. On the face of it, it appears present demographic trends are likely to complicate efforts to foster rapid growth, job creation by putting additional strains on wages, labor and housing markets and social safety nets. With this come also significant opportunities for reform, global integration and sustained improvements in economic welfare. We shall briefly discuss some of the macroeconomic implications of the New Demography in MENA.³

The New Demography and Economic Growth

² For entire MENA region, the working age population will increase annually by close to 6 million compared to half as much in the previous three decades.

³ Demographic changes such as those described above have also been associated with shifts in economic well being across age groups, intergenerational equity and social tension between the old and young (Bengston and Achenbaum 1993).

What are the consequences of demographic changes for long-run per capita GDP growth? Recent research has highlighted the importance of demographic transitions in explaining cross-country differences in per capita GDP growth. In short, what matters for economic growth is not the rate of population growth per se, but rather *the changing age-distribution of populations as countries move from conditions of high fertility and mortality to low levels in both*.⁴ Thus, when a large share of the population is dependent, non-working and under the age of 14 or over 65, an economy carries a demographic burden that lowers labor input per capita, depresses the savings rate and reduces the rate of GDP per capita growth. This was the case in Asia and Latin America in the 1950s and 1960s. Conversely, countries are endowed with a demographic gift when a larger share of the population is economically active (between the ages of 15 and 64), raising the labor force per capita, capital accumulation and GDP per capita growth as was the case in Asia during the miracle years of the 1970s and 1980s, East Asia in particular. From this perspective, one is able to understand the role of demography in MENA in the past and its potential contribution in the future. The economically active population in the sampled MENA countries is estimated to have grown by an impressive annual rate of 2.80 percent in 1970-2000; however, the dependent population also grew at a fast rate, 2.10 percent.

The result was a net annual difference of only 0.70 percent, smaller than the world's net

⁴ The theoretical basis of this argument relies on examining the impact of changes in the age distribution on the transitional dynamics of GDP per capita growth in a standard neoclassical growth model. In focusing on the impact of the changing age distribution of the population on economic growth, we are following a recent promising line of research that has disaggregated the impact of population growth into its components of fertility and mortality effects on economic growth (Kelley and Schmidt 1995; Lindh and Malmberg 1999a). The full explanation can be found in Bloom and Williamson (1998) who have identified demography as **the** most important factor distinguishing the high performing east and southeast Asian economies from the slower-growing economies in South Asia.

difference of 1.02 percent, and much smaller than East and Southeast Asia and Latin America's net difference of 1.84 percent and 1.60 percent, respectively.

In contrast, between now and the year 2015 the age distribution of MENA will become increasingly similar to that of East and Southeast Asia in the 1980s, with the working age population share rising to 62 percent and the dependent population share falling to 35 percent. As a result, MENA will enjoy the biggest demographic gift in its modern history and of all developing region in the world in the early 21st century: the working age population will grow by 2.45 percent while the dependent will grow by only 0.25 percent, giving a net increase (gift) of 2.20 percent per annum. If this projected future demographic gift is allowed to have its impact, the future will look very different for MENA. In contrast to the past, GDP per capita growth attributable to demographic influences **alone** is projected to accelerate between now and 2015. If nothing happens to offset them, demographic events will induce a 2.2 to 2.5 percentage point rise in MENA's GDP per capita growth.⁵

Will Labor Markets Cope?

While an opportunity, the rapid expansion of the working age population and the accompanying labor force growth present a serious challenge. In light of the projected rise in the working age population, employment growth rates in excess of 4 percent per annum will need to be sustained to absorb this growing population, allow for rising participation rates and reduce unemployment. How can faster and/or more labor-intensive

⁵ The basis for this calculation is a standard cross-country growth regression that includes, in addition to traditional variables, indicators capturing the effects of demographic transitions (Williamson and Yousef 1998).

economic growth be facilitated to provide jobs to an expanding labor force while ensuring sustained increases in per capita income? The mechanics of the demographic gift implicitly assume well-functioning labor and capital markets.⁶ In the absence of dynamic labor markets and steady output growth in the 1990s, the expanding working-age population contributed to the twin problems of unemployment and stagnant real wages. This was especially true for first-time job seekers whose unemployment rate was twice that of the labor force in a number of MENA countries (Al-Qudsi, Assaad and Radwan 1995).

A few illustrative examples will serve to highlight the magnitude of this challenge for a group of six MENA countries with high unemployment rates (Table 2).⁷ In Algeria where unemployment has been the highest in the region at 28 percent, the working age population is expected to rise by 2.7 percent per annum during 2000–2015, and the labor force by 3.7 percent, given the expected rise in the participation rate. Halving the unemployment rate by end-2015 would call for employment growth of 5.0 percent and real GDP growth of 6.5 percent per annum over the next 15 years compared to 1973-94 when employment and real GDP growth averaged 3.2 and 2.9 per annum, respectively. Tunisia and Egypt, on the other hand, face better prospects given their mature age

⁶ Recent cross-country studies indicate that national savings/investment ratios are strongly influenced by demographic transitions: high dependency rates depress both savings and investment, while a rise in the working age population induces the opposite (Higgins 1998; Lind and Malmberg 1999b). Thus, the ability to absorb an expanding labor force, in the presence of functioning credit markets, would support a faster rate of capital accumulation and wage growth.

⁷ The GDP growth requirements noted here are based on a growth-accounting exercise carried out in Dhonte, Bhattacharya and Yousef (2000). These projections indicate what is required to secure a 1.5 percent annual growth in real GDP per employee given the targeted employment growth and while maintaining past trends in the accumulation of human and physical capital.

structures and lower unemployment rates, and yet both will face pressures to generate growth and create jobs. In the case of Egypt, halving the current unemployment rate of 12 percent and absorbing a labor force growth of 3.2 per annum would require a future annual employment growth and real GDP growth of 3.6 and 5.1, compared to a 1.4 and 5.6 in 1973-94, respectively.

In all the non-oil countries in the region, the future requirements for employment creation and GDP growth are larger than what has been achieved in the past including the impressive record achieved during the oil boom era (Dhonte et al 2000). But the targets are not out of line with what has been accomplished in other parts of the world passing through the same phase of the demographic transition, East Asia in particular. With enhanced efficiency and dynamic markets, employment creation would expand and wage growth would be sustained. No doubt the private sector would have to assume a bigger role in this process.

Housing Demand and Job Creation

Where will the additional employment come from? Much attention has focused on the potential impact of trade liberalization and FDI on job creation in the region. There is another channel directly linked to the very demographic conditions that raised the issue in the first place: the demand for housing. As they have elsewhere, the new demographic conditions in the region are likely to spur a massive expansion in the housing construction sector since the rising numbers of young adults in the labor force would go hand in hand with a rise in demand for housing units. This story is well known in the case of the Baby Boom in the US (Mankiw and Weil 1989). Because housing construction is

predominately a labor-intensive activity, meeting the demand for housing can go a long way in addressing the employment problem, providing a two-way improvement in welfare. Recent trends in the housing market in MENA, especially on the supply side, are difficult to establish. On the basis of early surveys and qualitative evidence, however, there is little doubt that a substantial shortage of housing units has been building up since the late 1970s, with disproportionate effects on young adults and the poor. For example, the accumulated deficit in housing in Egypt between 1960 and 1979 was estimated at 2 million units and in Algeria, the construction of housing units fell from 90,000 units in 1986 to 30,000 in 1991, at a time when annual demand for housing was 200,000 units.⁸

For a group of six MENA countries (Algeria, Egypt, Iran, Jordan, Morocco, and Tunisia) with a total working age population of 125 million in 2000, the need for new housing is in excess of 3.5 million units per year, whereas deliveries are less than 0.7 million (Dhonte et al 2000). There would exist a large potential demand, which, if it could be made effective, would provide a major boost to domestic activity. This massive gap between need and effective demand for housing is a major opportunity for growth. Since housing construction typically accounts for 3 percent of GDP and 5 percent of employment in these countries, a many-fold increase in housing deliveries would provide a major boost to employment. Moreover, because housing construction is largely self-financing, this boost would be sustainable.

⁸ Social scientists have devoted extensive attention to the political and social implications of housing shortages in MENA. As Richards and Waterbury (1996) have observed, the high unemployment rates and lack of affordable housing in the 1990s are two intertwined problems facing young adults in the region.

Why does the need for housing fail to result in effective demand? Part of the answer is historical, rooted in the preferences of policymakers in many countries of the region for investment in industrial plant, which has depressed the housing sector of the initial funds needed for take-off. Another part lies in the poor documentation of property rights, which are poorly identified and secured, so that they cannot be used as collateral to access financing.⁹ Recent work on Egypt illustrates this point by documenting that the acquisition of title and a construction permit to a piece of desert land would require 77 bureaucratic procedures in 31 different offices and could take some 6 to 14 years to complete (de Soto 1997). The link between constraints on titling and shortfalls in the housing sector is further suggested by the absence of mortgage financing in many MENA countries, a crucial component for channeling resources from savers to investors. Major countries such as Algeria or Egypt have no mortgage market; Morocco's is minimal; and Jordan stands out in this respect among regional economies in that the stock of mortgages are equivalent to 10 percent of GDP. By contrast, the mortgage sectors in Europe are equivalent to 30 percent of GDP, and in the U.S. it is over 60 percent.

The Demand for Migration to Europe

Demographic shifts have historically exerted tremendous influence on the patterns of migration and the share of young cohorts in the sending countries has been central in this process (Hatton and Williamson 2000). Could migration to Europe help ease ongoing

⁹ Only 6 countries in MENA, all of them members of the Gulf Cooperation Council, ranked among the top 40 ratings of *Institutional Investor* in September 1990; only 4 of these remained in the list of September 1998. Similarly, only four Gulf countries and Morocco and Jordan ranked above the median in a composite index of economic security, developed from standard sources (Fabricius 1995).

pressures on labor markets in MENA? Traditionally, the movement of labor in MENA has been confined to the regional economy, largely in response to the demand for expatriate labor in the oil-exporting countries in the 1970s and to a much lesser extent in the 1990s. Given the significant income gap between MENA and Europe, the rising share of young adults in MENA is likely to have spurred an increase in the demand for migration to Europe. This demand would have been especially strong in the Maghreb countries where geographic proximity and networks of friends and families provide an additional incentive for labor movement.

From a labor supply side, this demand for entrance into protected European markets appears convenient in light of Europe's strong growth prospects but increasingly aging population and thinning young cohorts in the future.¹⁰ Indeed, the share of MENA's working-age population to that of the European Union (EU) has risen from 30 percent in 1970, to 65 percent in 2000 and will climb to 100 percent in 2015. More striking is the ratio of likely movers (ages 15-29) from MENA to the total labor market stayers in the EU (ages 20-64), which will more than double, from 12 percent in 1970 to 29 percent in 2015. But European labor markets will remain closed, at least in the short-run, to the entry of labor from MENA; the Euro-Med initiative focuses solely on trade and ignores labor flows. The shortage of unskilled workers in the EU has promoted several countries to import labor on a short-term basis from the neighboring transition economies. Over the long run, however, demography will work in favor of relaxing the

¹⁰ To keep the ratio of the working age population stable between now and 2050, the EU would need to import every year close to 1.6 million workers, and 10 times as much annually to keep the ratio of workers to pensioners steady (UN 2000).

constraints on emigration from MENA and Africa as the transition economies are converging faster to the EU demographically and economically.

Concluding Remarks

While population growth in MENA is on a sustainable downward trajectory, the age structure is rapidly changing in favor of those of working-age. Young and unmarried adults seeking work and housing are increasing in numbers, a trend that is likely to intensify in the next two decades. These young cohorts provide an opportunity for invigorating economic performance in MENA through rapid accumulation and faster growth. But the mechanics of demographic transitions require well-functioning markets and institutions. If the slow pace of job creation persists and the private sector remains a marginal player, unemployment will rise fueling social and political tensions. On the other hand, a sustained effort by policy makers to expand the depth and reach of credit markets and build the institutions of a modern market economy would generate new momentum for the engines of growth and employment. Europe stands to gain from the MENA's new demography. Even if the gates into Europe remain closed to emigration from MENA, the EU should support initiatives in the region aimed at channeling investment, creating jobs and sustaining long-term improvements in economic welfare.

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Table 1. Selected Regions: Key Demographic Indicators, 1970-2015

	Annual Growth Rates in Percent		Annual Flows in millions	
	1970–2000	2000–15	1970–2000	2000–15
World	1.70	1.07	79.3	69.8
<i>of which:</i>				
0–14	0.94	-0.04	14.8	-0.67
15–64	2.05	1.43	58.0	60.8
MENA (8 countries)	2.41	1.55	2.56	2.83
<i>of which:</i>				
0–14	2.10	0.25	0.97	0.19
15–64	2.80	2.45	1.51	2.43
European Union (15 countries)	0.34	-0.08	1.3	-0.3
<i>of which:</i>				
0–14	-0.95	-0.97	-0.7	-0.6
15–64	0.53	-0.19	1.2	-0.5

Source: World Development Report (1999) and UN Population Projections (1998).

Table 2. Past and Future Employment Trends in MENA, 1973-2015
(Annual growth rates in percent)

	Employment Growth					Unemployment Rate (in percent)	
	Estimated 1973–1994	Required 2000–15	<i>Of which</i>			Latest available 1/ official estimate	Targeted 2000–15
Working age Population 2/			Participation rate 2/	Unemployment reduction 2/			
Algeria	3.2	5.0	2.7	1.0	1.3	28.0	14.0
Egypt	1.4	3.6	2.2	1.0	0.4	12.0	6.0
Iran	2.6	4.1	2.5	1.0	0.6	14.0	7.0
Jordan	n.a.	4.4	2.8	1.0	0.6	15.0	7.0
Morocco	3.6	3.6	2.1	1.0	0.5	13.0	6.0
Tunisia	2.3	3.6	2.1	1.0	0.6	15.0	7.0

Sources: Dhnote, Bhattacharya and Yousef (2000).

1/ Level in percent of labor force.

2/ Contribution in points to the desired increase in employment.