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YOUTH BULGE AND THE DEMOGRAPHIC WINDOW OF OPPORTUNITY IN THE ARAB WORLD

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I. INTRODUCTION

Youth in the Arab world find themselves in the midst of rapid social and economic change, facing new challenges as well as new opportunities created by cultural and economic globalization. In order to understand the situation of youth in the Arab countries today, and indeed in many developing countries, it is crucial to understand the demographic changes that produced such an historically unprecedented number of young people in the Arab world (the youth bulge), and in the world today. These demographic changes have or will potentially have implications on economic growth and human development.

Underway across the Arab world is an interrelated set of demographic and other changes in youth population. Also noted is the diversity that exists among countries in the region. Many countries will experience rising youth numbers of some time to come, while in others, youth numbers have already begun to decline.

A relatively crucially important aspect is the transitional and historically novel character of contemporary demographic changes among youth, stressing that these changes have the characteristic of being onetime, irreversible and non-repeatable processes. The present paper will attempt to explain the nature of what is the so-called "demographic window of opportunity" and as it is underway in the Arab world. An attempt will be made to discuss its implications, within the complex interactions between demographic and socio-economic variables, that have given rise to the notion of "demographic dividends". However, for these dividends to materialize, there must be in place a cognitive policy environment (section V). "A failure to act could have a damaging effect on future prospects as unemployment rises, the social fabric crumbles, and rising number of old people begins to overwhelm available resources. Embracing and understanding demographic challenges must therefore be a priority to all governments" (Bloom et al 2003).

This paper uses mainly the population estimates and projections provided by the United Nations Population Division in World Population Prospects: the 2008 Revision Population Data Base. The analysis is based on the "medium variant" of these projections.

Finally, in keeping with the definition adopted by most international organizations, the youth population is defined as the population aged 15-24. The age group 10-19 years will be referred to as adolescents.

II. DEMOGRAPHIC PROFILE OF ARAB COUNTRIES

A. POPULATION GROWTH

The timing and speed of demographic transition vary considerably among Arab countries. Thus, general trends mask wide variations by country. The features will be best highlighted by focusing on one country at a time, a matter that is outside the capacity of the present paper.

In the Arab region, as in other regions of the world, high fertility and low mortality during the 1960s and 1970s were responsible for major demographic shifts, the impact of which is apparent today. The average fertility rates among Arab countries was 7.2 per woman in the 1960s (compared to 4.6 worldwide); this figure held relatively steady for more than two decades then declined thereafter to reach an average of 3.3 births per woman by 2000. During the same period, mortality rates, particularly infants, dropped steadily by an average of 2.3 percent annually (compared with an average decrease of 1.6 per cent at the global level (UN, 2007).

The population of Arab countries more than tripled between 1960 and 2005, increasing from 170 million in 1980 (3.8 per cent of total world population) to roughly 291 million in 2000 (4.7 per cent of total world population). According to U.N. projections (2008 revision/medium variant) the Arab population will increase to nearly 360 million in 2010 and to as much as 461 million in the year 2025 (nearly 5.9 per cent of

total world population). Although the population has grown rapidly in all countries in the region, the rate of expansion has been most dramatic in the GCC states, where the number of residents has increased nearly seven-fold since 1960 (UN 2007). This is partially attributable to the unique migration patterns prevailing in the area, which translated into extremely high labor force growth rates over the past several decades (UN, 2007).

The size differed considerably by country. Egypt, with a population of more than 70 million in 2000, ranks highest, and is projected to reach nearly 105 million by the year 2025. [See table 1]

TABLE 1. POPULATION SIZE AND GROWTH RATES 1980-2000 AND PROJECTED TO 2025 IN ARAB COUNTRIES

		Annual Growth Rates (%)									
Population (000s)						1980-	2000-	2005-	2010-	2015-	2020-
Country	1980	2000	2010	2025		2000	2005	2010	2015	2020	2025
Jordan	2225	4853	6472	8088		4.08	2.74	3.02	1.44	1.55	1.46
United Arab											
Emirates	1015	3238	4707	6109		5.11	4.67	2.82	1.97	1.72	1.53
Bahrain	347	650	807	1021		3.34	2.25	2.08	1.77	1.56	1.37
Saudi Arabia	9604	20808	26246	34176		4.18	2.53	2.12	1.95	1.77	1.56
Syrian Arab											
Republic	8959	16511	22505	28592		3.07	2.94	3.26	1.69	1.56	1.54
Iraq	12962	24652	31467	44692		2.92	2.72	2.17	2.63	2.29	2.11
Oman	1187	2402	2905	3782		3.94	1.72	2.08	1.92	1.78	1.58
Palestine	1476	3149	4409	6553		3.85	3.56	3.18	2.87	2.63	2.42
Qatar	229	617	1508	1848		4.65	7.23	10.65	1.55	1.31	1.21
Kuwait	1375	2228	3051	3988		2.46	3.84	2.44	2.04	1.77	1.55
Lebanon	2669	3772	4255	4736		1.32	1.58	0.83	0.79	0.71	0.64
Egypt	43915	70174	84474	104970		2.17	1.9	1.81	1.66	1.44	1.24
Yemen	8140	18182	24256	35509		3.97	2.91	2.86	2.74	2.57	2.31
Tunisia	6469	9452	10374	11797		1.93	0.88	0.98	0.96	0.87	0.74
Algeria	18740	30506	35423	42882		2.39	1.48	1.51	1.45	1.29	1.08
Comoros	387	552	691	907		3	2.21	2.29	2.07	1.78	1.57
Libyan Arab											
Jamahiriya	3043	5346	6546	8144		2.71	2.05	2	1.79	1.46	1.12
Djibouti	327	730	879	1111		3.56	1.97	1.76	1.61	1.51	1.57
Sudan	19387	34904	43192	56688		2.42	2.06	2.2	2	1.83	1.61
Somalia	6487	7394	9359	13992		1.48	2.44	2.27	2.74	2.64	2.57
Mauritania	1609	2604	3366	4443		2.49	2.74	2.4	2.07	1.84	1.65
Morocco	19382	28827	32827	37865		2.03	1.13	1.2	1.17	1.06	0.9

Source: UN Population Division, World Population Prospects: The 2008 Revision.

Table 1, second panel, shows the annual growth rate in five year intervals from 2000 to 2025 in comparison to the annual growth rate in the period 1980-2000 for each of the countries of the region. As shown in Table 1, the population growth rate varied considerably among countries. The annual population growth reached a peak of 3 per cent around 1980 (2 per cent in the world). The rates will tend to decline considerably in the coming decades. For the region as a whole, the rate of population growth during the period 1980-2000 was 2.61 percent (1.6 per cent world). During the period 2000-2020 it is projected to decline to 2.04 per cent (ESCWA, 2005), the second highest in the world after sub-Saharan Africa.

In spite of the declining population growth rates (with the exception of Somalia and Mauritania), the population of the Arab world will continue to grow significantly for several decades.

B. TRENDS IN MORTALITY AND FERTILITY

The Total Fertility Rate (TFR) is a useful summary measure of actual fertility behavior and the Infant Mortality Rate (IMR) is better than Crude Death Rate (CDR) at showing the decline in mortality. It was decline in IMR that played the most important role in deriving declines in overall death rate during the demographic transition. IMR dropped from close to 200 deaths per 1000 live births in the early 1950s to fewer than 50 around the year 2000. Tables 2 and 3 show trends in some mortality and fertility rates in the Arab countries during the period 1980-2025.

TABLE 2. CRUDE DEATH RATE (CDR), INFANT MORTALITY RATES (IMR), AND LIFE EXPECTANCY FOR BOTH SEXES IN THE ARAB COUNTRIES DURING SELECTED PERIOD 1980-2025

	1980-1985		2000-2005			2010-2015			2015-2020			2020-2025			
Country	CDR	IMR	е	CDR	IMR	е	CDR	IMR	е	CDR	IMR	е	CDR	IMR	е
Jordan	8.9	54.1	63.7	4.4	23.2	71.3	4	16.5	73.6	4	14.5	74.6	4.1	12.9	75.5
United Arab															
Emirates	4	31.6	68.6	1.6	10.3	76.7	1.5	9	78.1	1.7	8.4	78.7	2	7.9	79.2
Bahrain	4.5	22	68.9	2.9	11.2	74.8	2.6	8.9	76.4	2.9	8.3	77.1	3.4	7.7	77.7
Tunisia	7.6	59.3	64.9	5.8	22.5	73	6	17.3	74.8	6.2	15.1	75.6	6.4	13.1	76.5
Algeria	10.4	88	60.5	5	37.4	71	4.9	25.8	73.5	5	21.7	74.5	5.1	18.9	75.4
Comoros	13.7	105.6	52.9	7.6	57.7	63	6	40.1	67.1	5.4	33	68.9	6.4	27.2	70.5
Libyan Arab									ŀ				ŀ		
Jamahiriya	10.9	47	62.2	4.1	20.9	72.7	4.2	15.8	75	4.4	14.2	75.8	4.7	12.8	76.6
Syrian Arab					•			İ							
Republic	8.2	59.3	62.5	3.6	18.6	73.1	3.3	14	75.1	3.3	12.4	75.9	3.4	10.9	76.7
Djibouti	19	132.5	44.7	11.7	85	53.8	10.4	66	57.1	9.8	57.9	59.1	9.1	50.7	60.8
Sudan	15.9	110.2	49.1	34.5	73.3	56.7	28.8	61.9	59.8	26.6	55	61.7	24.7	48	63.3
Somalia	22	143.3	43	16.2	40.6	49.4	14.5	101.3	51.5	13.1	92.7	53.4	11.9	84.3	55.4
Iraq	8.1	73.8	62.3	5.3	36.5	70.2	4.9	30.1	70.2	4.8	28.4	70.6	4.7	24.6	71.6
Oman	7.7	98.3	62.7	2.8	15.2	74.2	2.8	10.5	76.6	3.1	9.7	77.3	3.4	9	78
Palestine	9.1	50.6	64.4	4.2	20.9	72.4	3.3	15.2	74.4	3.1	13.4	75.4	3	11.7	76.2
Qatar	4.9	34	67	2.5	9.8	74.2	2.1	7.7	76.3	2	7.2	77	2	6.8	77.7
Kuwait	3.2	21.8	71.3	1.7	9.7	76.9	2.1	8.5	78.2	2.5	8	78.8	3.1	7.5	79.4
Lebanon	8.8	44.4	65.9	7	25.2	71	7.1	19.2	72.9	7.2	17	73.9	7.3	14.8	74.9
Egypt	12.4	107.5	56.5	6	39.5	69	5.7	30.2	71.1	5.7	25.6	72.2	5.7	21.4	73.4
Mauritania	17.5	119.6	47.4	35.8	72.7	56.5	31.3	68.8	58.2	28.2	65.3	59.7	25	61.8	61.1
Morocco	11.4	95.9	58.3	6	37.5	69.6	5.8	29.3	72.4	5.8	21.5	73.4	6	18.6	74.6
Saudi Arabia	7.8	58.4	62.6	3.8	22.4	71.6	3.6	16.4	73.8	3.7	14.3	74.7	4	12.6	75.5
Yemen	16.8	125.9	49.1	8.6	69.3	60.3	6.3	49.1	64.9	5.5	40.7	67	4.9	33.4	68.8

Source: UN Population Division, World Population Prospects: The 2008 Revision.

Trends in mortality and fertility are to be examined to shed light on patterns of demographic transition in the Arab world. High fertility rates prevailed in the 1950s and 1960s (on average, fertility in the Arab region declined from 7 children per woman around 1960 to 3.6 in 2000) but tended to decline gradually starting in the early 1980s; concomitantly, death rates witnessed a rapid decline, leading to a high population growth rate, considered the highest in the world, during this period.

Decline in death rates in the past few decades, coupled with steady increase in life expectancy was mainly a result of improvements in health interventions such as antibiotics, immunizations and sanitation as well as rise in levels of education. IMR dropped in all Arab countries and is expected to decline more in the next two decades (table 2).

TABLE 3. CBR AND TOTAL FERTILITY RATES (TFR) IN THE ARAB COUNTRIES DURING THE PERIOD 1980-2025

Country	1980-1985		2000	-2005	2010	-2015	2015	-2020	2020-2025	
	CBR	TFR	CBR	TFR	CBR	TFR	CBR	TFR	CBR	TFR
Jordan	42.3	6.8	27.8	3.53	23.7	2.81	20.9	2.54	18.7	2.32
United Arab Emirates	29.5	5.2	16.5	2.49	13.1	1.88	11.5	1.85	10.5	1.85
Bahrain	32.8	4.6	19.6	2.51	16.8	2.11	15.2	1.95	14.0	1.85
Tunisia	33.6	4.9	16.3	1.97	16.0	1.82	15.2	1.80	14.2	1.84
Algeria	40.6	6.4	20.7	2.53	20.2	2.26	18.6	2.16	16.3	2.07
Comoros	48.7	7.1	33.1	4.2	29.4	3.60	25.7	3.33	23.1	2.94
Libyan Arab Jamahiriya	45.6	7.2	24.0	3.03	21.5	2.47	18.4	2.26	15.4	2.9
Syrian Arab Republic	46.4	7.3	29.5	3.64	25.3	2.93	21.9	2.64	19.1	2.41
Djibouti	44.3	6.6	31.4	4.52	26.5	3.48	24.9	3.13	23.2	2.86
Sudan	41.6	6.0	34.5	4.82	28.8	3.70	26.6	3.29	24.7	2.98
Somalia	51.8	7.3	45.7	6.50	42.8	6.17	39.9	5.75	37.9	5.28
Iraq	41.0	6.4	34.1	4.63	28.6	3.66	26.3	3.26	24.3	2.96
Oman	46.0	7.2	24.0	3.80	21.7	2.84	20.5	2.64	18.9	2.48
Palestine	44.6	7.0	39.1	5.63	32.8	4.50	30.1	3.93	27.8	3.47
Qatar	28.7	5.5	15.7	2.92	11.2	2.27	10.4	2.17	9.6	2.08
Kuwait	34.7	4.9	18.6	2.30	16.3	2.09	14.6	2.01	13.4	1.94
Lebanon	29.3	3.8	17.6	2.09	15.6	1.85	15.2	1.85	14.5	1.85
Egypt	38.7	5.3	25.7	3.16	23.2	2.68	20.9	2.51	18.9	2.37
Mauritania	43.2	6.3	35.8	4.90	31.3	4.07	28.2	3.61	25.8	3.24
Morocco	37.1	5.4	20.9	2.52	19.8	2.26	18.3	2.16	16.5	2.07
Saudi Arabia	41.7	7.2	26.5	3.81	22.0	2.83	20.4	2.56	18.7	2.34
Yemen	55.6	8.5	38.6	5.90	34.7	4.65	31.9	4.08	28.6	3.57

Source: UN Population Division, World Population Prospects: The 2008 Revision.

On the other hand, the pattern of fertility decline varies considerably among Arab countries---a matter that has a direct impact on the timing, speed and magnitude of the demographic transition. Decline in fertility is attributable to a variety of correlated factors including better levels of education, particularly among women, including their relatively increased participation in the labor force, later marriages and increased contraceptive prevalence rates (ESCWA, 2005). Decline in fertility rates is expected to continue in the coming decades, yet clearly with variable speed from one country to another. Table 3 shows CBRs (per 1000 population) and TFR in the Arab countries in selected periods between 1980-2025. The Arab countries may be classified according to when to reach replacement level (approx. TFR=2.1) as follows:

- 1. Reached or will reach replacement level before 2020: Tunisia, Lebanon, Bahrain, Algeria, United Arab Emirates, Kuwait.
- 2. Reaching replacement level between 2020-2030: Libyan Arab Jamahiriya, Qatar, Morocco.
- 3. Reaching replacement level between 2030-2040: Jordan, Syrian Arab Republic, Egypt.
- 4. Reaching replacement level after 2040: Comoros, Djbouti, The Sudan, Somalia, Iraq, Oman, Palestine, Mauritania, Yemen.

III. THE DEMOGRAPHIC DIVIDEND IN THE ARAB WORLD

A. UNDERSTANDING THE DEMOGRAPHIC DIVIDEND

Simply stated, the demographic dividend occurs when falling birth rates changes the age structure, so that fewer investments are needed to meet the needs of the youngest age groups and resources are released for investment in development (Ross, 2004).

In other words, a falling birth rate makes for a smaller population at young, dependent ages and for relatively more people in the adult age groups---who comprise the productive labor force. It improves the ratio of productive workers to child dependents in the population. That should make for faster economic growth and fewer burdens on families (Ross, 2004).

The demographic dividend is characterized as being delivered during a *limited* time span, i.e. does not last forever. That is, it is a limited window of opportunity occurring over time, therefore creating continuous upward movement of the age structure where the large cohorts of adult population move into older cohorts (less productive age groups) and is followed by smaller cohorts born during the fertility decline, i.e. the dependency ratio rises again, this time to care for the elderly (youth deficit).

Another feature of the demographic dividend is that it is *irreversible*---once started it will continue. However, the dividend is not automatic, i.e. some countries will take better advantage of that than others.

It is the complex interaction between these demographic and socio-economic variables that have given rise to the notion of "demographic dividend" in the literature. The demographic dividend is delivered through a number of mechanisms; the three most important are labor supply, savings and human capital. However, it is one thing to have the dividend, but taking advantage of it is another matter (Bloom, 2002).

First: the demographic transitions affects labor supply in several ways; the generations of children born during periods of high fertility finally leave the dependent years and can become workers. The labor force temporarily grows more rapidly than the population dependent on it, freeing up resources for investment in economic development and family well-being. Furthermore, women are more likely to enter the workforce as family size declines and they have fewer children than before. They tend to be better educated than older cohorts, thus, more productive in the labor force (provided there are no barriers inhibiting female participation in modern economic enterprises).

Eventually, lower fertility reduces the growth rate of the labor force while continuing improvements in old-age mortality speed growth of the elderly population.

Second: The demographic transition could also encourage the growth of savings as working-age adults tend to earn more and can save more. Personal savings grow and serve as a partial resource for investments that fuel economic growth.

Third: significant effects of the demographic transition on investments in human capital, which may be the most significant. The demographic transition involves larger life expectancy which in turn causes fundamental changes in the way people live. Attitudes change in favor of better education, later marriage, retirement, role of women and late entry into work all tend to shift, i.e. there are gradual deep-rooted changes in cultures' prevailing norms and values. Parents are more likely to choose to educate their children to more advanced levels. As a result the labor force becomes more productive, promoting higher wages and a better standard of living.

Women's health will be enhanced due to having fewer children, while participating more in the labor force will enhance their social status and personal independence (parents are under less strain to provide for many children).

B. THE DEMOGRAPHIC TRANSITION IN THE ARAB COUNTRIES: A WINDOW OF OPPORTUNITY

It is simple to define the window of opportunity, but much more difficult to formulate a precise index that identifies when a country is about to commence transition, low long it will take and when it is coming to an end. The UN population division has defined it as the period when proportion of children under 15 year falls below 30 percent and proportion of old people 65 years and older is still below 15 percent. However, the exact boundaries of definition may still vary. Table 4 shows a classification of the Arab countries by start and end of the demographic window phase and corresponding dependency ratios (according to median variant) (UN, 2004).

TABLE 4. START AND END OF THE DEMOGRAPHIC WINDOW PHASE AND CORRESPONDING DEPENDENCY RATIO BY COUNTRY (MEDIUM SCENARIO)

	De	mographic	window		Dependency Ratio				
Country	Start	End	Length (yrs)	Start	Minimum	End			
United Arab Emirates	1975	2025	50	43.3	32.2	45			
Qatar	1985	2025	40	40	35.4	48.2			
Bahrain	2000	2040	40	47	37.3	48.2			
Kuwait	1995	2030	35	44	35.4	44			
Tunisia	2005	2035	30	47	41.4	46			
Algeria	2010	2045	35	49.3	42.8	49.5			
Libyan Arab Jamahiriya	2005	2045	40	51.8	41.6	49.7			
Lebanon	2005	2035	30	51.6	42.6	47.9			
Morocco	2010	2045	35	50.8	46.2	50.5			
Syrian Arab Republic	2020	2050	30	51.9	44.1	49.6			
Egypt	2020	2050	30	56.2	46.7	48.9			
Saudi Arabia	2025	2060	35	52.3	46.9	48.7			
Sudan	2030	2065	35	53.9	47.6	49.3			
Iraq	2035	2065	30	51.3	46.8	48.6			
Oman	2030	2065	35	54.7	49.7	49.7			
Jordan	2020	2050	30	50.1	45.6	49.5			
Comoros	2035	2070	35	51.5	47.1	50.7			
Djibouti	2045	2080	35	52.8	46	50.6			
Mauritania	2045	2080	35	54.9	46	50.6			
Palestine	2045	2070	25	53.6	47.8	48.9			
Yemen	2060	2095	35	54.1	44.7	49.7			
Somalia	2065	2095	30	50.1	44.9	50.8			

Source: UN Population Division, World Population Prospects: The 2008 Revision.

According to table 4, seven Arab countries have already started a demographic window, which is expected to continue through 2025-2040 [United Arab Emirates, Qatar, Bahrain, Kuwait, Lebanon, Libyan Arab Jamahiriya and Tunisia]. Two more Arab countries will enter this transition in the coming decade before 2020, namely Algeria and Morocco. The decade 2020-2030- will include Syrian Arab Republic, Egypt, Jordan and Saudi Arabia starting in the window lasting approximately 30 years, until 2050. All other countries are not due to start until 2030 or after. The last two countries to start the window are Yemen (2060) and Somalia (2065). (It is important to keep in mind the limitations of these projections).

It is thus now apparent that a demographic transition is well underway in the Arab world, even if it is not yet complete. However, the speed of the transition, and the resulting population size and structure will vary by country.

It is to be noted that if fertility rates do not fall as rapidly as now projected, aggregate population will be larger, putting greater pressures on natural resources and the social fabric. Lower rates of population growth will reduce pressure on natural resources, but this may be offset by the increase in per capita consumption.

National variations are apparent in table 4. While the dates involved certainly cannot be precise, they do convey an essential relationship between fertility decline and demographic transition. One group of countries, such as Tunisia and Lebanon, experience early and rapid fertility decline, this prompted clearly defined demographic transition. In these countries, the sequence from the onset of fertility decline to absolute decline in youth population takes no more than 30 years. Another group of countries experiences less rapid fertility decline, such as Algeria and Morocco, yet still will show fairly rapid demographic window lasting 35 years. A third group of countries is experiencing yet slower fertility decline such as Egypt, Syrian Arab Republic and Jordan; the demographic window onset will be delayed until after the year 2020. The last group of countries such as Yemen and Somalia, are characterized by late starting and relatively slow fertility decline taking place within relatively low levels of economic advance. The demographic transition in these countries is much slower and less distinct.

C. THE YOUTH BULGE

The Youth Bulge is simply a large number of young people constituting a large relative cohort size. This was a result partly of improved survivorship and partly a deficit of infants and children due to recent fertility decline.

Today, 1.2 billion people are aged 15-24 worldwide, the most ever in history. This poses what may be called "youth bulge" in the world's population structure. Eighty-seven percent of youth live in developing countries with 43 percent of them living in the least developed countries. (Bloom, 2002).

The Arab countries are experiencing an unprecedented "youth bulge" with over 30 percent of the population in the age group 15-29 representing over 100 million, the highest in the region's history. (MEYI, 2003). To understand this phenomenon, it is important to look back at the rapid growth of the 1960s as the origin of today's youth cohorts. If the children born in the 1960s are considered the children of the population explosion, today's youth cohorts are the grandchildren of the population explosion, the children of those earlier large cohorts. (Lam, 2006).

Table 5 provides the percentages of young people (15-24) to total population and to population in the working age (15-64) as well as their size at selected years 2000-2025.

As shown from table 5, there is little question that the current youth cohorts are larger than ever before and that a period of rapid growth in the size of youth is continuing. There is a rapid approach to a peak in their size in some Arab countries, some have already reached it, others will not reach a peak until after a decade or more. Table 6 below attempts to classify Arab countries by timing of the peak in the size of the population aged 15-24. Of note is that youth population will continue to grow until reaching the peak, then it is a mathematical necessity that the growth rates must be declining afterwards.

TABLE 5. PERCENTAGES OF YOUNG PEOPLE (15-24) TO TOTAL POPULATION AND TO POPULATION IN THE WORKING AGE (15-64) AND SIZE AT SELECTED YEARS 2000-2025

	% aged 15-24			% youtl	to workin	g 15-64	Size of youth 15-24 (000s)			
Country	2000	2010	2025	2000	2010	2025	2000	2010	2025	
Jordan	21.8	20.4	18.1	37.8	32.7	26.8	1058	1320	1464	
United Arab Emirates	16.5	11.9	14	22	14.9	17.3	534	560	855	
Bahrain	17.1	17.9	14.5	24.7	24.8	19.4	111	144	148	
Tunisia	20.7	19.8	13.1	32.6	27.4	19	1957	2002	1545	
Algeria	22.6	20.5	15.1	36.6	30	19.3	6894	7262	6475	
Comoros	22.7	19.3	19.7	39.5	32.7	31.1	125	133	179	
Libyan Arab Jamahiriya	21.1	19.1	17.2	32.7	29.2	25.1	1128	1250	1400	
Syrian Arab Republic	23.1	20.5	18.8	41	33.4	33.4	3814	4614	5175	
Djibouti	20.2	21.6	18.6	37.3	36.6	29.9	148	190	207	
Sudan	19.9	20.3	19.4	36.4	35.2	30.7	6946	8768	10994	
Somalia	19.3	18.6	20	36.3	35.4	36.4	1427	1735	2784	
Iraq	20.5	19.9	19.7	38.2	35. 5	31.2	5054	6262	8804	
Oman	23.7	20.5	17.6	38.8	31	26	569	595	666	
Palestine	18.7	19.9	20.7	37.6	40.5	40.4	589	876	1370	
Qatar	13.9	17.9	11.6	19.1	21.6	14.2	86	270	214	
Kuwait	14.9	14.4	13.5	18.7	19.3	18.2	332	439	538	
Lebanon	18.3	18	13.6	29.1	26.6	19.7	690	766	644	
Egypt	20.9	20.2	17.4	35.5	32.5	26.4	14666	17063	18265	
Mauritania	20.5	20.1	19.9	37.1	34.7	31.5	533	677	884	
Morocco	21.1	19.7	15.5	33.9	29.6	23	6082	6379	5869	
Saudi Arabia	18.9	18.9	16.5	31.9	29.1	24.1	3933	4960	5639	
Yemen	20.3	22.1	20.2	40.9	40.8	34.2	3673	5361	7173	

Source: UN Population Division, World Population Prospects: The 2008 Revision.

TABLE 6. CLASSIFICATION OF ARAB COUNTRIES BY ESTIMATED TIMING OF REACHING THE PEAK IN SIZE OF YOUTH (15-24)

Category	Definition and countries
1	Countries reached the peak or will reach before 2010 to before 2020: Tunisia, Algeria, Qatar,
	Lebanon, Morocco
2	Countries reaching the peak 2020-2030: Jordan, Bahrain, Libya, Syria, Egypt
3	Countries reaching the peak after 2030: Comoros, Djibouti, Iraq, Mauritania, Yemen, Oman,
	Somalia, Palestine, Saudi Arabia

It is noteworthy that in the labor-receiving Gulf States, such as Bahrain and Qatar, immigration plays an important role, since large numbers migrate to these states for work.

In countries in category 1, the peak youth is experienced or being experienced about 20 years after the onset of fertility decline, that is, after the number of infants and children have been reduced, but before the youth population has been similarly affected (Xenox,2002), i.e. decline started in the late 1980s and 1990s. By 2025, the share of youth in these countries is expected to drop to 15 percent or less. It is said that a youth share below 15 percent constitutes a "youth deficit", which may be equally problematic because it leads to such outcome as inadequate new entrants to the labor force (Xenox,2002). Countries in category 2, with fertility decline beginning in the late 1990s or thereafter, peaks have not yet been experienced but are projected in the decade 2020-2030. However, there are important variations in the shape of these transitions. The youth population in Category 3 countries will continue to grow for the next several decades. Countries with relatively late and less rapid fertility declines generally take longer to reach their peak numbers of

youth. The countries are characterized by late-starting and relatively slow fertility decline, thus the demographic transition is much slower and less distinct. These countries produce large proportional expansions of their youth populations and will experience the fastest growth. For example, the number of youth in Yemen will increase by more than 3 million during the period 2005-2025. As a result, the young population (15-24) in these countries will still make up around 20 percent of the population in 2025.

In all cases, however, the share of the youth group to total population and to population in working ages (15-64) will be declining and will continue to decline. Indeed, the youth population as a percentage of the total population is important for economic purposes, no less than their proportion to the working age population, because of interaction with prevailing social and economic institutions.

In sum, a clear "youth bulge" marks the demographic profile in the Arab region. Thus, the challenge is whether countries have the commitment to formulate and implement policies and programs to reap the benefits arising from this window of opportunity.

IV. IMPACT OF YOUTH BULGE: CHALLENGES AND OPPORTUNITIES

Youth find themselves in the midst of rapid demographic, socio-economic and political changes, facing new challenges yet also new opportunities created by cultural and economic globalization. As the youth bulge is yielding large positive returns, it will have negative impacts that may incur tremendous costs to individuals and societies if not addressed timely and properly. In the Arab region, these challenges will play out differently, yet many of the issues and mechanisms needed to be addressed are common to all the countries in the region.

A. YOUTH BULGE AND ECONOMIC PERFORMANCE

Larger numbers of youth entering the workforce are having fewer dependents and thus fewer to support. However, if they are unemployed or even underemployed for long periods, they could be a drain on the economy and a source of social unrest. This is indeed a waste of human resources.

Increases in the absolute and relative numbers of youth on the labor market have several economic implications particularly as related to wages and employment opportunities.

Both unemployment and underemployment are major concerns for young people trying to provide for themselves and their families. In the Arab region, generally, youth unemployment rates are already relatively high, estimated in 2005 at 29.7 percent are considered the highest in the world (UN, 2002). These rates leave more than one in four young people in search of jobs. Young people are finding it increasingly difficult to break into the labor market, especially with the youth bulge creating even larger numbers of new entrants. This may result in even higher unemployment rates due to exerting pressures on the labor market. Economic growth alone is not always accompanied by growth in employment.

In addition to large numbers of new entrants to the labor market, many economies in the Arab region suffer not only from slow growth which constrains opportunities for job creation but are struggling to provide for the basic needs of their growing populations. Furthermore, it is to be noted that the dynamics of the job market are changing where many governments tend to privatize state enterprises and young people are encouraged to seek jobs in the private sector, which may be sluggish to be able to accommodate the steady flow of new entrants to the labor market (World Bank, 2005).

Not only are unemployment rates in general high, but rates among youth exceed those of adults in all Arab countries, suggesting that "joblessness is in many respects a youth issue" (UN, 2002). For example, in Egypt and Syrian Arab Republic, youth make up more than 60% of the unemployed .In Syrian Arab Republic, unemployment rate among youth (15-24) are more than six times higher than those among adults.

In Tunisia, the unemployment rate for 20-24 years old is more than three times higher than that for people above 40. (WDR 2007).

It is also worth mentioning that duration of unemployment, particularly for new graduates is extremely long. For example, it is estimated to last up to 3 years in countries like Morocco (MEYI, 2003). The start towards a working life is the most important marker of independence. Long periods of inactivity during youth are costly, with the scars felt most by the less educated and disadvantaged.

Another feature in the Arab region is the lower labor force participation rates among females, which persists even among younger cohorts with higher educational attainment. In all Arab countries, labor participation rates for females are much lower than those for males as indicated in table 7. Actually, women in the Arab world face the highest rate of unemployment in the world. For example, unemployment rates in Egypt were reported to be 24 percent for women in 1995, compared to 7 per cent for men.

TABLE 7. ACTIVITY RATES BY SEX AMONG POPULATION 15 OR MORE IN SOME ARAB COUNTRIES

		,			Youth	Youth
Country	Year	Total	Men	Women	15-19	20-24
Algeria	2003	27	47	6.6	NA	NA
Bahrain	2001	47.1	64	29.1	12.8	66.5
Egypt	2005	29.6	45.7	12.8	22.6	49.5
Kuwait	2007	52.3	66	32.3	6.2	61
Lebanon	2007	32.7	49.6	16.2	16.1	45.2
Tunisia	2003	33.2	48.8	17.5	21	45.1
Morocco	1999	38.2	59.4	22.2	48.0*	
Oman	2003	36.6	53.3	15.3	13.8	59
Qatar	2004	59.7	76	27.1	7.9	66.6
Syrian Arab Republic	1999	28.1	44.4	11.1	57.8	50.6
United Arab Emirates	2005	62.3	78.9	26.6	10.4	70.9

Source: www.ilo.org/employment.

Thus, several labor market risks may prevail as a result of "youth bulge" including higher unemployment, especially among the young, falling wages and long periods of inactivity. Fluctuations in demand for labor often disproportionally affect women and the poor and vulnerable young people more.

B. Youth BULGE AND SOCIO-POLITICAL INSTABILITY

There are many complicated, interrelated factors that may lead young people to participate in activities that undermine social peace and stability. With region's youth bulge and the expansion of higher education, growing numbers of young people are hardly able to find gainful employment. Earning an income through paid employment strengthens self-esteem and independence and is an essential component of the transition to responsible adulthood. Under such circumstances there may be increased risk of political violence. This may be aggravated by negligible participation in public affairs, political exclusion, poor social protection and expanded informal economy (UN, 2002). Furthermore, "Contemporary studies on youth are based on historical assumptions that the youth bulge phenomenon often has a negative contribution to societies already torn by unrest and political disarray" (ESCWA, 2008).

Therefore, demographic change, combined with persistent poverty and unemployment, are a source of conflict. Young people are typically dynamic, resourceful and receptive to change, but if they are uncared for, unguided and unemployed, their energy can turn in destructive directions. The "youth bulge" could signal an upsurge of violence unless preventive measures are taken now. Thus, the failure of governments to meet the youth needs may prompt the youth in inciting riots and violence.

In turn, violence triggers wide array of direct and indirect impacts on economic, political and social organization and has a negative impact on the development process. Political and civil rights and free press allow youth to draw attention to their need and demand appropriate action.

C. YOUTH BULGE AND CHANGING CULTURE

Globalization and faster technological change are altering the nature of social interaction and affecting the efficacy of existing institutions. Although globalization and technological change offer many benefits, they can have deleterious side effects with adverse spillovers (World Bank, 2002). Young people face both new challenges and new opportunities created by cultural and economic globalization.

Many people in the Arab region associate the processes of globalization with the imposition of Western values on their own cultures and resent them accordingly, particularly with revival of religious adherence (UNFPA, 2007).

The flow of information and ideas, boosted greatly by the Internet and access to expanded media sources such as satellite dishes, can enable youth to learn more rapidly and can facilitate networks. Because young people know a lot and their literacy rates are much higher than before, they are more frequently users of the Internet which provides them with the most available information. However, in most countries in the region, the Internet is, to some extent, an exclusively well-to-do phenomenon.

With this wave of technological advance and change, it is more demanding from workers beyond basic skills. These advances mean rising demand for skills, with the skills needed and the way they can be developed differing greatly from those obtained by just completing primary school. A number of countries have identified areas in which traditional education is incompatible with the demands of the global marketplace (UN, 2002). "It has been observed that in several countries in the Arab region educational curricula do not incorporate these technical and occupational components that are currently in high demand in the job market" (UN, 2002).

The demographic transition, with increased longevity, expanding youth size and other factors, causes fundamental changes in the way that people live. Attitudes about education, family retirement and role of women tend to shift. Several cultural changes occur. The social change aspects of youth transition include shift towards later marriages for both men and women, though somewhat more markedly for females than males (mean age at first marriage has increased significantly in almost all Arab countries in the past two decades). Furthermore, another shift observed by social scientists that may not be easily measured, is some degree of disaffection from traditional public mores and a decline of guidance and protection within families furthering the generation gap.

D. IMPACT ON GENDER CONCERNS

As to gender issues, the investment of Arab governments has paid off in terms of educational attainment for girls, the gender gap in education among youth has almost disappeared. In Egypt, for example, the differential in average years of schooling for men and women in the age group 20-24 is only 0.2 years. In Jordan, the overall level of educational attainment is higher among young women than among young men. However, throughout the Arab region, educational gains have not necessarily reflected on employment opportunities. Employment opportunities for young women remain limited. Labor force participation among women in the Arab region has long been the lowest in the world. [See table 6] The economic empowerment of young women requires action on several fronts.

It is argued that with pressure on the job market due to the large numbers of new entrants, the impact may be negative on women's participation rates since men will be preferred when competing for the smaller number of jobs available. This may be particularly true in Arab societies which consider men as the main providers in the family.

Young women continue to face barriers in many areas of employment. However, as women having fewer children (the fertility transition) enhances the health of women. Their participation in labor force, in turn, enhances social status and personal independence. They tend to have more energy to contribute both to their families and to the society. Parents are under less strain to provide for many children. Family income can be focused more upon better food for infants and to prolonged education for girls and for teenagers of both sexes to improve their life prospects (Bloom, 2002).

V. BENEFITTING FROM THE DEMOGRAPHIC DIVIDEND: A POLICY FRAMEWORK

There is considerable policy interest in youth among Arab governments. This focus on youth by governments as well as international and regional agencies reflects the general recognition that youth can be a considerable resource for national development but also a significant source of problems. This interest has been heightened due to implications of demographic transition and the resulting "youth bulge".

The United Nations reflected this priority in world forums, starting in 1990 in the World Conference on Education For All. Youth issues were clearly emphasized in the ICPD 1994 in Cairo and in the World Summit for Social Development (Copenhagen, 1995), then in the Bejing Declaration (1995). The world community adopted the World Program of Action for Youth (1995) to the year 2000 and beyond, which was comprised of policy framework and practical guidelines for national action and international support to improve the status of youth. The World Program of Action for Youth lists ten priority areas then five other priorities added in 2003. In addition, the Millennium Development Goals (MDGs), which emanated from the United Nations Millennium Declaration in 2000, constitute a series of commitments to be achieved by 2015; many of the goals address the youth group.

In recent years, some Arab countries have started developing national strategies, policies or plans for youth, namely Bahrain, Iraq, Jordan and Yemen (ESCWA, 2008). However, "this region's political, social and economic systems have not evolved in a way that effectively meets the changing needs of its rapidly growing young populations" (Assaad et al, 2007).

Three main general guiding principles are to be considered in implementing policies addressed to youth:

First, specificity: It is to be recognized that one size does not fit all in considering a plan or policy for youth. There is no simple, universal blueprint for implementing any strategy. Arab countries need to prepare their own mix of policies to reduce poverty, reflecting natural priorities and local realities. Choices will depend on the economic, socio-political, structural and cultural context of individual countries (World Bank, 2001). Priorities will have to be set in individual cases based on resources and what is institutionally feasible. Each country is to adopt a pragmatic approach aiming not at what should be done, but at what can be done according to its circumstances.

Second, *continuity*: Current and future generations in the Arab countries will require substantial as well as sustained growth in income and productivity in these countries. It is thus important to have continuous efforts of economic growth, not stop and start, so it can be felt throughout and particularly among the youth populations.

Third, accountability: Problems can be misdiagnosed when there is lack of reliable, current and disaggregated information. Detailed data to monitor and manage the problems at local and national levels are important to track and serve as early signals as well as measure trends and conditions. Data gaps inhibit understanding the impact of policies. There is a need for significant investment in information systems producing good indicators to meet monitoring and evaluation demand at all levels. These indicators should rest on a solid foundation of supporting data. Fortunately, rapid changes in information technology make it

possible to get data through a combination of surveys, reports and other sources at much less cost than before.

Policy implementation regarding youth may face some difficulties or barriers, including:

- 1. Costs and benefits are sometimes highly uncertain; often benefits materialize in the long-term, while costs are incurred in the short run.
- 2. Political forces and social pressures can sometimes retard the speed by which policies are being implemented.
- 3. Governance practices, including corruption, applying the role of the law justly and without prejudice serve to insure that the poor, the marginalized and those most vulnerable are included in benefits.

Youth policies may be classified under three main areas:

First, broadening and promoting opportunities: This is accomplished by expanding economic opportunities for young people by stimulating overall growth through combinations of market and non-market actions. Adolescents are at a particularly formative stage and they are open to acquiring knowledge and learning skills (intervening early in the life cycle).

Developing youth's human capital becomes a special challenge as their numbers increase during the youth bulge. In terms of employment, efforts should be directed towards increasing micro-finance and entrepreneurship programs to benefit young people. These policies should target the unemployment and underemployment among the vulnerable and marginalized youth while also promoting youth employment and skill development in the context of globalization. Policies which improve human resource capabilities and create jobs are essential to absorb the large numbers of youth entering the labor market. Economic sectors should be capable of absorbing surplus manpower and, in particular, that which is the outcome of demographic changes.

Better health facilities improve economic production, thus it is important for policies to promote health during the demographic transition, including insuring that infants receive good health care, women's reproductive health is protected with the overall focus especially on poor populations.

Preparing the growing working-age population for the era of economic globalization means that continuation of such a high number of illiterates is not acceptable. For example, despite increasing the literacy rate in Egypt, the total number of illiterate population 15 years and older increased from 16 to 19 million between 1980 to1995. Morocco's illiterate population grew from 8 to 9.5 million during the same period, with women making up two-thirds of the illiterates.

The education system should be involved in both the economic and social aspects of the development process and incorporated into planning for development process. It is therefore necessary to formulate goals for the system that will make it consistent with the needs of the community, i.e. the needs of the labor market. In this respect, the transition from primary to secondary is especially important. Finally, the quality of education, particularly in public schools, must be a priority to be able to take full advantage of opportunities.

In this respect, actions are to be taken to improve technical, secondary and higher education, maximizing the use of new technologies increasing vocational professional and life-skills training in such a way to facilitate the transition from school to work. Growing market economy and introduction of new technologies demand new skills not provided by the existing public education systems.

Second, enhancing capabilities of youth as decision makers: While opportunities are necessary, they are not sufficient---they should be coupled with enhancing the demand side, i.e. focus is often on the supply side; providing services such as health and education and so on, with the assumption that if they have them, people will make the best decisions (WWIC, 2003).

Parents, families and youth themselves should be empowered to decide more capably among life's opportunities. Thus, institutions should become more responsive to young people, strengthening their participation in the political process and local decision making, while removing the social barriers that may result from any form of discrimination. For example, choosing to invest in skills presents substantial costs to young people or their families; a way to lift this constraint is to provide credit. Arriving at correct decisions can be influenced by incentives. Thus, helping young people to choose well is a priority; policies must stimulate young people and their parents and communities to invest in themselves.

Gender issues are of particular interest in the Arab region where attitude change is required to eliminate all forms of discrimination and ensure equal participation at all levels of society. Thus employment opportunities for women are increased, as well as gender sensitive health services such as sexual and reproductive health.

Third, reducing vulnerabilities: Policies are to be addressed towards poor young people aiming at reducing vulnerabilities and risks involved whether economic, health or others to help them cope with adverse conditions when they occur, including offering second chances. These include, for example, youth rehabilitation programs, treatment programs for those infected with communicable diseases and retraining programs for dropouts. (World Bank, 2007). Other health risks facing young people are HIV/AIDS and other STDs with half of all new HIV infections worldwide occurring in people aged 15-29 (UNFPA, 2003).

VI. CONCLUDING REMARKS

The Arab countries are at various stages of demographic transition, where mortality rates are low and fertility rates are declining, reflections on the age composition are a key component of social and economic development, where the number of youth---the largest generation in history---grows large relative to the dependent population. This is a window of opportunity that can be exploited to generate sustainable development. These opportunities are now present---or will be approaching shortly in many Arab countries--but will not last long and will not be repeated. It is the complex interactions between these demographic and socio-economic variables that have given rise to the notion of "demographic dividend".

However, if the appropriate environment is not in place, unemployment and instability may result, and health, education, and social welfare systems may undergo unbearable strain (Bloom, et al, 2002). The social fabric crumbles and rising numbers of old people begin to overwhelm available resources.

Therefore, all governments in the Arab world are to consider the focus on embracing and understanding demographic challenges and their impact on social and economic development for the present and future young generations as their priority.

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