



The Moshe Dayan Center
for Middle Eastern and African Studies

Data and *Analysis*

Economic and Demographic
Developments in the Middle East
and North Africa, 1980-2000

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The Moshe Dayan Center for Middle Eastern and African Studies

The Moshe Dayan Center for Middle Eastern and African Studies seeks to contribute by research, documentation, and publication to the study and understanding of the modern history and current affairs of the Middle East and Africa. The Center is part of the School of History and the Lester and Sally Entin Faculty of Humanities at Tel Aviv University.

Data and *Analysis*

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Introduction

This is the first publication of the Moshe Dayan Center's Project on Economics and Demography in the Middle East. It provides an introduction to the relationships between economic and demographic development in 17 Arab countries, with a brief discussion of conditions in Iran and Turkey. After looking at demographic and economic issues, it examines growth rates of income per capita and other measures of human welfare.

The Middle East and North Africa (referred to in the text as the Middle East) is defined here as including Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, Turkey, the UAE and Yemen. Israel is largely excluded, owing to its fundamentally different economic profile.

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Demographic Developments

Introduction

This chapter begins with an overview of trends in regional population growth. The second section surveys the process of demographic transition, while the third and fourth sections analyze mortality and fertility trends. The fifth section looks at the social and economic factors that have influenced fertility trends and the final section deals with some social and economic implications of population growth and demographic trends. All of these are compared with global trends.

Trends in Global Population Growth

The extraordinary expansion of the world's population was one of the distinguishing features of the 20th century. At the dawn of the Christian era, world population was an estimated 250 million, and up until the 15th century, high mortality rates and periodic plagues, famines and wars limited the population to between 300 and 400 million. Since then, population has grown – reaching some 730 million by the middle of the 18th century and 1 billion by the middle of the 19th century.¹

The growth rate of world population accelerated from the first half of the 19th century, reaching 1 billion in less than 100 years (around 1930) and 3 billion in another 30 years (around 1960). It increased by close to 300 percent during the 20th century – from some 1.6 billion in 1900 to more than 6 billion by the year 2000.²

A sustained increase in human life expectancy has been the major factor in the acceleration of population growth. The process began in Western countries as death rates began to fall rapidly in the first half of the nineteenth century. Some years later, parents began to limit the size of their families and community birth rates started to fall. These two sides of the demographic transition process were well advanced in Western Europe by the start of the 20th century. During the last century, many industrialized populations reached a state of zero growth, as fertility rates fell to near or below replacement levels. In some cases, fertility was so low that a new stage of substantial population decline was observed to be underway.³

Less developed regions began the first stage of this demographic process in the middle of the 20th century, resulting in rapid population increase during most of the second half of the century. The widening gap between falling death rates and high birth and fertility rates did not start to narrow until the 1970s or 1980s. In some parts of these regions, this second stage of the demographic transition process only began to be felt around the turn of the 20th century.

Middle East Trends

In the Middle East, the population grew at a slow pace in the 19th century and accelerated in the middle of the 20th century. The total population of the region, which had fluctuated at around 30 million for hundreds of years, grew to 60 million over the 19th century, and to over 100 million by 1950.⁴ The acceleration of the population growth rate from the 1950s onward resulted in a total of some 170 million in 1970, 250 million in the early 1980s and close to 400 million in the early 2000s. The growth rate of 270 percent over the period 1950-2000 was the highest in the world and compared to 30 percent growth in Europe and 260 percent in sub-Saharan Africa.⁵

The pattern of Middle East population growth over the last three decades, by sub-region and countries, is shown in Table 1 below. Population growth in comparison to other parts of the world is shown in Table 2. The annual rate of population growth reached its peak of some 3 percent around 1980, compared to the growth rate of the world as a whole, which reached its peak of 2 percent in the 1960s.⁶ Middle East population growth trends changed dramatically around 1980. Since the early 1980s, growth rates have declined rapidly, to an annual rate of 1.9 percent in 1999.⁷

Middle East Population Growth by Sub-Region

Overall demographic trends are the combined result of different, and in some cases divergent, trends in sub-regions and individual countries, reflecting their different conditions and stages of development. Sharp declines in growth rates in Egypt, Turkey and Morocco have decreased their share of total population. Iraq and Syria maintained high growth rates until the 1990s, and their share of total Middle East population rose.

The share of three other sub-regions has increased, reflecting high population growth rates during the period 1970-99. These are Saudi Arabia and the Gulf states; Yemen; and the Israel-Palestine-Jordan Triangle. Saudi Arabia and the Gulf states experienced the most rapid growth. This was the result both of higher rates of natural

Table 1: Middle East Population Growth

	Population				Average Annual Population Growth Rate			
	1970 (millions)	1980 (millions)	1990 (millions)	1999 (millions)	1970-1979 (%)	1980-1989 (%)	1990-1999 (%)	1970-1999 (%)
Algeria	13.7	18.7	25.0	30.0	3.1	3.0	2.1	2.7
Libya	2.0	3.0	4.3	5.4	4.2	3.9	2.3	3.5
Morocco	15.3	19.4	24.0	28.2	2.4	2.2	1.8	2.1
Tunisia	5.1	6.4	8.2	9.5	2.1	2.5	1.7	2.1
Sub total	36.2	47.5	61.5	73.1	2.7	2.6	1.9	2.4
Egypt	33.1	40.9	52.4	62.7	2.1	2.5	2.0	2.2
Israel	3.0	3.9	4.7	6.1	2.7	1.8	3.0	2.5
Jordan	1.5	2.2	3.2	4.7	3.8	3.8	4.4	4.0
WBG(1)	1.2	1.5	2.0	2.8	2.2	2.8	3.9	3.0
Sub total(1)	5.7	7.6	9.9	13.6	3.0	2.7	3.7	3.1
Lebanon	2.6	3.0	3.6	4.3	1.5	1.8	1.8	1.7
Syria	6.3	8.7	12.1	15.7	3.3	3.3	2.9	3.2
Sub total	8.9	11.7	15.7	20.0	2.8	2.9	2.6	2.8
Turkey	35.3	44.5	56.1	64.4	2.3	2.3	1.6	2.1
Bahrain	0.2	0.3	0.5	0.7	4.5	4.3	3.1	3.9
Kuwait	0.7	1.4	2.1	1.9	6.3	4.6	-0.6	3.4
Oman	0.7	1.1	1.6	2.3	3.9	4.1	4.0	4.0
Qatar	0.1	0.2	0.5	0.6	7.4	7.8	2.0	5.7
Saudi Arabia	5.7	9.4	15.8	20.2	4.7	5.3	2.9	4.3
United Arab Emirates	0.2	1.0	1.8	2.8	16.1	5.9	5.0	9.0
Sub total	7.8	13.5	22.3	28.5	5.2	5.2	2.7	4.4
Yemen	6.3	8.5	11.9	17.0	2.8	3.3	4.0	3.4
Iraq	9.4	13.0	18.1	22.8	3.3	3.3	2.6	3.1
Iran	28.4	39.1	54.4	63.0	3.1	3.4	1.7	2.8
Total Middle East	171.0	226.3	302.3	365.0	2.9	3.0	2.1	2.7
Total Arab	104.2	138.8	187.1	231.6	2.9	3.1	2.4	2.8

Source: World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Note:

(1) Population data for WBG is available in the above source only for 1990 and 1999, and average annual growth rate only for 1990-1999. The source of WBG population data for 1970 and 1980 and for pop. growth between 1970-1990 is Israel, Central Bureau of Statistics, Statistical Abstract 1996 (Jerusalem, CBS, 1997), Table 27.1. The CBS 1970 and 1980 data was amended to include East Jerusalem population.

Table 2: Middle East and World Population Growth 1950 - 2000

	(overall increase, %)
Middle East	270
Sub-Saharan Africa	260
Latin America	220
Asia	160
North America	80
Europe	30

Source: UN, World Population Prospects, The 2000 Revision (New York, United Nations, 2001)

increase and the absorption of large immigrant populations, boosting these countries' share of the regional population from 4.5 percent in 1970 to 7.8 percent in 1999 (total population was 8 million in 1970 and 30 million in 1999). Yemen's high population growth reflects its late catch-up with the demographic trends of developing countries. Its share of the region's population grew to some 5 percent in 1999.

Israel's population more than doubled between 1970 and 1999, despite its low rate of natural increase, as a result of large waves of immigration in the early 1970s and the 1990s. This trend, combined with rapid Palestinian and Jordanian growth rates, resulted in the total population of the Triangle rising from 6 million in 1970 to 15 million in 1999. The Triangle's share of total Middle East population thus increased to 4 percent. Figure 1 shows the population breakdown in 1999 by sub-region. The changes in percentage of sub-regions between 1970 and 1999 are presented in Table 3.

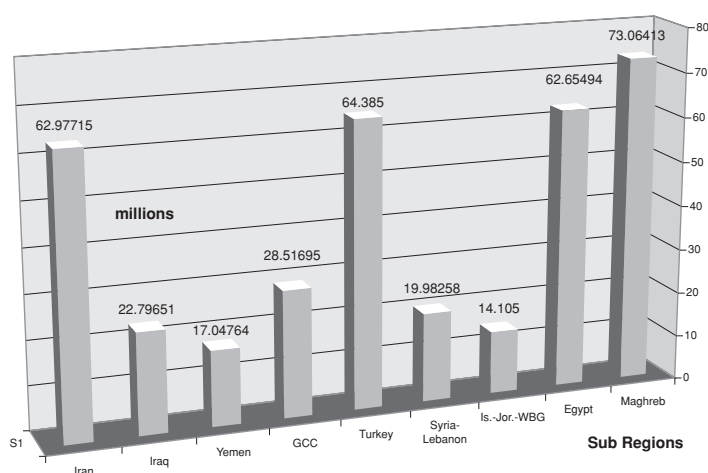
Figure 1: Middle East Population by Sub-Regions – 1999 (based on Table 1)

Table 3: Middle East Population by Sub-Regions (percent)

	Birth Per Woman			
	1970	1980	1990	1999
Algeria	7.4	6.7	4.5	3.4
Morocco	7.0	5.4	4.0	2.9
Egypt	6.0	5.1	4.0	3.3
Israel	3.8	3.2	2.8	2.9
Syria	7.7	7.4	5.3	3.7
Turkey	5.3	4.3	3.0	2.4
Saudi Arabia	7.3	7.3	6.6	5.5
United Arab Emirates	6.5	5.4	4.1	3.3
Yemen	7.7	7.9	7.5	6.2
Iran	6.7	6.7	4.7	2.7
Average	6.4	5.8	4.4	3.3

Source: World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Demographic Transition

According to the theory of demographic transition, countries have followed a stable two-stage process. The process starts from a state of relatively low population growth rates, generated by a combination of high fertility and mortality rates; it ends with a state of relatively low population growth rates, resulting from both low fertility and low mortality rates. Between these stages, fertility and mortality rates decline.

In the first stage, mortality declines, creating a wide gap between mortality and fertility rates. The result is high rates of population growth. Most of the developed countries passed this stage in the second half of the 19th century or the first half of the 20th century. The developing countries passed this stage, in general, over the second half of the 20th century. In the second stage, fertility rates also decline. Thus, a new state of stability is reached, with both birth and death rates at a low level.⁸

First Stage – Mortality Decline

The UN estimates that until 1850, there was an average of 35-40 deaths and some 40 births per 1,000 inhabitants per year, permitting a moderate increase in the population of more developed and less developed countries alike. After 1850, annual death rates in the more developed regions decreased to about 28 per 1,000 from 1850-1900, to about 18 per 1,000 from 1900-50, and to 10 or less per 1,000 since 1950.⁹

In the less developed regions, the reduction of mortality was delayed by nearly a century, but then it occurred with great rapidity. Death rates averaged some 38 per 1,000 inhabitants per year during 1850-1900, and 32 per 1,000 inhabitants per year during 1900-1950. The average for 1950-60 was 21 per 1,000, and for 1960-70 it was only 17 per 1,000.¹⁰

Middle Eastern mortality rates have also declined rapidly and continuously in the period 1950-2000, reaching 16 deaths per 1,000 in the population in 1970; 12 per 1,000 in 1980; 8 per 1000 in 1990; and 6 per 1,000 in 1999 – well within the range of the developed countries' standards.¹¹

Life Expectancy Increases

In view of the strong influence of age composition upon the crude death rate, it is necessary to analyze life expectancy at birth in order to understand the full magnitude of the mortality decline. Until the second half of the 19th century, life expectancy of less than 30 years was the norm, common throughout the world. At the beginning of the 20th century, many of the developed regions had a life expectancy no higher than 45-50 years. Radical improvements in health conditions in the 1950s led to increases of as much as five years per decade. In later years, as high levels of life expectancy were reached, this increase slowed down.¹²

UN data show that in 1965 there still were large differences in life expectancy at birth between developed and less-developed countries, and even larger differences among different groups of less-developed countries. Life expectancy at birth was estimated as 69-71 years in the more-developed countries, 64 years in temperate regions of South America, and 38-60 years in other less developed regions.¹³ The average life expectancy at birth in 1980-85 was 57.6 years for the developing countries as a whole, as against 68.5 years for the developed countries.¹⁴

The gap of more than 10 years in life expectancy between the developing and the developed countries remained almost unchanged during the last two decades of the 20th century. According to the World Bank's categorization of low- and middle-income countries, average life expectancy at birth was 60 years for the first group in 1980, and 74 years for the second group. A similar gap of 14 years is shown in the 1999 figures, as life expectancy at birth increased by four years for both groups, averaging 64 years for the first group, compared with 78 years for the second.¹⁵

Middle Eastern life expectancy conformed to this global trend: it increased by some 15 years over the last three decades of the 20th century – from 54 years in 1970 to 69 years in 1999.¹⁶

Life Expectancy Increase by Sub-Regions

A closer look at the figures of the low- and middle-income countries reveals three different patterns. Low- and middle-income countries of East Asia and the Pacific, Europe, Central Asia, Latin America and the Caribbean regions, which had life expectancy rates of 65-68 years in 1980, experienced increases of up to 5 years between 1980-99, reaching 69-70 years in 1999. Sub-Saharan countries, which had a life-expectancy rate as low as 48 years in 1980, experienced a decline to 47 years in 1999. Middle Eastern countries, which had an average life expectancy rate of 59 years in 1980, had a much higher average increase, of 9 years in life expectancy, from 1980-99, to 68 years in 1999. Similarly, South Asian countries, which had an average life expectancy rate of 54 years in 1980, also experienced a 9-year increase in life expectancy from 1980-99, to 63 years in 1999.¹⁷

Second Stage – Fertility Decline

According to UN data, average birth rates in the more developed countries dropped from 38 per 1,000 in 1850-1900, to 26 per 1,000 in 1900-1950, and to 19 in 1960-70. In most less developed countries, birth rates hardly fell until the 1960s. Thus, the gap in birth rates widened enormously during the more than 100-year period between the middle of the 19th century and the 1960s. The UN figures for 1965 showed that in almost all of the developed regions of the world, birth rates ranged from 16-20 per 1,000, while the range for the less developed regions was from 36-49 per 1,000.¹⁸

This picture changed quite dramatically over the 1970s and 1980s. Many developing countries experienced substantial decreases in their birth rates and fertility patterns, though only few of them reached the low fertility stage, defined by the UN to be less than 2.5 live births per woman during childbearing years (i.e. TFR = total fertility rate of less than 2.5). However, most of them were already in various stages of the transition process.¹⁹

In the Middle East, fertility rates remained high until the 1980s. Although fertility rates were halved during the period 1950-99, from some 7-8 births per woman to around 3.5 births per woman, most of this decrease took place between 1980 and 1999.²⁰ Thus, the average total fertility rate figures for countries of the United Nations Economic and Social Commission for West Asia (UNESCWA) *, which showed only slight declines over the third quarter of the 20th century, declined by more than 50 percent from 1978-98.²¹

* Bahrain, Egypt, Iraq, Jordan, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, UAE, Yemen.

Fertility Decline by Sub-Regions

A closer look at the figures for developing countries shows divergent patterns among different countries. The UN World Population Prospects report for 1988 revealed the following picture: in Eastern Asia, all developing countries were either at the low fertility stage (i.e. TFR of less than 2.5), or at the advanced transition stage (i.e. TFR of 2.5-4.5). In Latin America and in Southern Asia and the Pacific, most developing countries were at the advanced transition stage, some were already at the low fertility stage, and some still at the early transition stage (i.e. TFR of 4.5-6.5.). In the Middle East and in sub-Saharan Africa, however, about half the countries were still in the pre-transitional stage (i.e. TFR of 6.5 or more), while most of the remaining countries were at the early transition stage.²²

A similar pattern of diversity is reflected within the Middle East, between its various sub-regions. The TFR of many countries was halved over the 1980-99 period, to rates as low as 2.5-3.5 in 1999, while in other countries the TFR by 1999 was still as high as 5.5-6.²³

Third Stage – Absolute Decline in Population Size

Since the 1960s, as more and more countries entered the low fertility stage, a new phenomenon emerged. According to the demographic transition theory, these countries were supposed to arrive at a stable state of relatively low population growth rates generated by both low fertility and low mortality rates, as fertility rates stabilized around or slightly over the replacement rate of 2.1 per 1,000. Instead, in many of these countries, fertility rates continued to fall far below the replacement rate. In most of Western Europe, where there had been fertility rates of 2.5-3 per 1,000 in the mid-1960s, the replacement rate was crossed in the 1970s, and by 1992 some countries were already below the 1.5 rate. It is only because large populations of childbearing age were born in these countries during the higher fertility period of the 1940s-60s that dramatic declines in population were prevented.²⁴ However, this temporary, though protracted, period of “fertility momentum” is coming to an end. Unless fertility rates increase at rates closer to the replacement level, declines in population size will begin in these countries.²⁵

For the Middle East, this stage seems remote, though rapid fertility declines in certain countries, such as Turkey and Tunisia, bring them quite close to the replacement rate line. Moreover, some communities experienced absolute population declines over the last decades of the 20th century. The extreme example was the Christian community of Lebanon, where declining fertility was coupled with emigration to produce an absolute decline in population size.

Demographic Transition at the End of the 20th Century

The Middle East entered the 21st century with the two components of demographic transition well underway. Despite the continuous decline in fertility rates, the population is projected to continue its rapid growth for several more decades. This projection is based on a phenomenon known as “population momentum”: the new generations of young people reaching childbearing age are larger than the previous generations. Thus, in spite of lower fertility rates, they still produce larger numbers of births.

The population of the Middle East is forecast to grow by around 90 percent during the coming 50 years (in comparison to 270 percent over the preceding 50 years), to reach some 720 million in 2050. This would be among the highest growth rates in the world, second only to that of sub-Saharan Africa.²⁶

There are substantial differences between the various sub-regions and countries of the region. Some oil-rich countries (and Israel) have mortality rates and life expectancy figures close to European levels, while other countries lag far behind. Kuwait, for example, registered in 2000 an infant mortality rate of 9 per 1,000 (against the Middle East average of 44 per 1000), while the figure for Yemen was 75 per 1,000. Life expectancy figures range from 59 years in Yemen or Iraq to 72-75 in most of the oil-rich countries (compared with a Middle East average of 68 years).

Fertility rates, which averaged from 7-8 births per woman in 1950, declined in 2000 to 2-2.5 births per woman in Iran, Lebanon, Tunisia and Turkey, and to 3-3.5 births per woman in Algeria, Egypt, Jordan and Morocco. High rates of 6-7 births per woman prevailed in Oman, Palestine, Saudi Arabia and Yemen.²⁷

Middle East Mortality and Life Expectancy Trends

Crude Death Rates

As shown above, the process of mortality decline in the less-developed regions, including most countries of the Middle East, occurred a century later than in developed countries, but then took place at great speed. Mortality rates in the region declined rapidly and continuously from 1950-2000, as a result of the introduction of modern medical services and public health measures, including antibiotics, immunization and better sanitation.²⁸ Total crude death rates declined from 16 deaths per 1,000 in 1970, to 12 per 1,000 in 1980, to 8 per 1,000 in 1990 and to 6 per 1,000 in 1999 – well within the range of developed countries.²⁹ The death rate figures for selected countries, listed in Table 4, shows that most countries in the region began the 21st

century with death rates around the regional average of 6 per 1,000 people. Some of them have actually reached world average death rates of 2-4 per 1,000 people.

When comparing Middle East crude mortality rates with those of developed countries, the much younger age profile of the Middle East population should be taken into account. Tables 5 and 6 show mortality and life expectancy trends for selected Middle Eastern countries.

Infant and Child Mortality Rates

The Middle East's average infant mortality rates (infants dying before their first birthday) fell from close to 200 deaths per 1,000 live births in the early 1950s to fewer than 50 deaths per 1,000 live births at the end of the 20th century.³⁰ The decrease in infant mortality rates during the last quarter of the 20th century lowered the UNESCWA countries' rate from 106 per 1,000 births in 1975-80 to 47 per 1,000 births in 1998-99. This was well below the world average of 56 per 1,000 births (the world rate in 1975-80 was 86 per 1,000 births).³¹ However, the UNESCWA countries' average was higher than the average rate of 10 per 1,000 for developed countries or the Israeli rate of 6 per 1,000.³² Similar patterns were found in mortality rates for children below five years of age. The UNESCWA countries' rate was 62 deaths per 1,000 in 1997, compared with a world average of 87 per 1,000.³³

Life Expectancy

Life expectancy at birth is considered the primary indicator of overall health conditions in a society. The improvement of health conditions as measured by life expectancy is shown in Table 15. Average life expectancy increased by some 15 years over the last three decades of the 20th century – from 54 years in 1970 to 69 years in 1999.³⁴

The life expectancy indicator also confirms that almost all countries in the region experienced these developments.³⁵ At the end of the 1990s, the sharp increase in life expectancy enabled the Middle East to close the gap with the world average. Moreover, the figures for most of the countries in the region exceeded the world average. Only Iraq and Yemen were significantly below the world (and the regional) average.³⁶

Table 4: Middle East Mortality Rates 1970-1999

	Crude Death Rate per 1000 people			
	1970	1980	1990	1999
Algeria	16	12	7	6
Morocco	16	12	8	7
Egypt	17	13	9	7
Israel	7	7	7	6
Syria	13	9	6	5
Turkey	12	10	7	6
Saudi Arabia	18	9	5	4
United Arab Emirates	11	5	3	3
Yemen	23	19	14	12
Iran	16	11	7	6
Average	16	12	8	6

Source: World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Table 5: Middle East Mortality Rates 1970-1999

	Deaths per 1000 live births			
	1970	1980	1990	1999
Algeria	139	98	46	34
Morocco	128	99	64	48
Egypt	158	120	69	47
Israel	25	16	10	6
Syria	96	56	39	26
Turkey	144	109	58	36
Saudi Arabia	119	65	32	19
United Arab Emirates	87	55	20	8
Yemen	186	141	110	79
Iran	131	87	47	26
Average	138	99	56	37

Source: World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Table 6: Life Expectancy 1970-1999

	Life Expectancy at Birth – Years			
	1970	1980	1990	1999
Algeria	53	59	67	71
Morocco	52	58	63	67
Egypt	51	56	63	67
Israel	71	73	76	78
Syria	56	62	66	69
Turkey	57	61	66	69
Saudi Arabia	52	61	69	72
United Arab Emirates	61	68	74	75
Yemen	41	49	52	56
Iran	55	60	66	71
Average	54	59	65	69

Source: World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Fertility Trends

Since the 1970s the Middle East has experienced rapid changes in fertility. Virtually all socioeconomic factors encouraged a rapid fertility decline, though specific local circumstances delayed this process in some countries. The expansion of educational opportunities resulted in an increased level of literacy, higher school enrollment and educational attainment. Improvements in health services and public sanitation resulted in lower total mortality and child mortality. These rates are now low enough to permit a rapid change in women's preference for a smaller family. Fertility was also driven by many other aspects of economic development, including the transformation of the economy from an agricultural base to a mixed economy, the spread of urbanization, electrification of rural areas, expansion of transport networks and of mass media.³⁷

The effect of the decline in fertility began in the 1980s, as average Middle East birth rates started to fall substantially, although in some countries the decline started only in the 1990s (see Table 7). Table 8 shows the sharp decline in total fertility rates in the 1980s and 1990s.

Determinants of Fertility

The level of fertility in every society is determined by four main factors, those affecting exposure to sexual intercourse, exposure to conception, success of gestation and parturition (i.e. ratio of live births to total births), and the duration of women's temporary sterility after giving birth.

Table 7: Crude Birth Rates 1970-1999

	Births Per 1000 Population			
	1970	1980	1990	1999
Algeria	49	42	31	25
Morocco	47	38	31	25
Egypt	40	39	31	26
Israel	26	24	22	21
Syria	47	46	37	29
Turkey	36	32	25	21
Saudi Arabia	48	43	36	34
United Arab Emirates	35	30	24	18
Yemen	53	53	47	40
Iran	45	44	31	21
Average	43	40	31	25

Source : World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Table 8: Crude Birth Rates 1970-1999

	Birth Per Woman			
	1970	1980	1990	1999
Algeria	7.4	6.7	4.5	3.4
Morocco	7.0	5.4	4.0	2.9
Egypt	6.0	5.1	4.0	3.3
Israel	3.8	3.2	2.8	2.9
Syria	7.7	7.4	5.3	3.7
Turkey	5.3	4.3	3.0	2.4
Saudi Arabia	7.3	7.3	6.6	5.5
United Arab Emirates	6.5	5.4	4.1	3.3
Yemen	7.7	7.9	7.5	6.2
Iran	6.7	6.7	4.7	2.7
Average	6.4	5.8	4.4	3.3

Source : World Bank, World Development Indicators 2001, Table 2.1; devdata.worldbank.org

Most of the variation in fertility was due to four variables: age of marriage (exposure to intercourse), use of contraception (exposure to the risk of conception), abortion (influencing the outcome of gestation), and duration of breast-feeding (influencing the duration of women's temporary sterility after giving birth). Despite the importance of abortion in many societies, this factor is excluded from fertility data and analysis, since abortions are usually not reported.³⁸

The Age of Marriage

Marriage has traditionally been viewed as an indicator of initiation of exposure to sexual intercourse. This is no longer the case in Western countries and cannot be applied on a worldwide basis or in cross-country (between countries) analysis. Thus, "marriage" is defined, for demographic purposes, as including all unions of a stable character, informal or legal.³⁹ In recent decades, the age of first marriage has risen in many of the developed countries. This, along with a sharp rise in the rates of divorce and separation, has reduced birth rates.⁴⁰

In developing countries, women have tended to marry relatively early and marriage has been nearly universal. Current experience is nevertheless quite varied. In Asia and Oceania, age of marriage was often higher than in Europe. Thus, decreased proportions of married women in the total female population of reproductive age play an important role in fertility decline. Changes in the customary age of marriage impose a greater restraint on fertility at higher than at lower levels of development; they thus reinforce the impact of contraception. There is also evidence both of a preference for fewer children among women who marry late, and a predisposition toward higher fertility in societies where early marriage prevails.⁴¹

In the Middle East, virtually everyone ultimately marries, but there are wide variations in the age of marriage, within and between countries. A change from early to later marriage is related to the modernization process of the society and to socioeconomic conditions. Substantial differences were found according to the type of residence and across levels of occupational achievement. Research carried out at the end of the 1980s in six Middle Eastern countries at different stages of socioeconomic development found that the age of first marriage varied from 17 years to 24 years. In most Middle Eastern countries, the age of first marriage at the end of the 1980s was 21-22 years. The Middle Eastern age of marriage increased by more than three years during the 1970s and 1980s.⁴²

Breast-feeding and Post-birth Abstinence

Breast-feeding has a strong influence on birth intervals: birth is followed by a period of temporary sterility. The duration of this period averages 1.5-2 months for women who do not breast-feed, while the average for women who breast-feed for two years or more is reported to be 15-24 months.⁴³ In the Middle East, breast-feeding is one of the most important factors affecting birth-spacing and family size among woman who do not practice any form of contraception.⁴⁴

This factor is particularly important in countries falling into the low or middle-low development groups, or in countries where family planning efforts are weak or nonexistent. In these countries, the restraint on fertility imposed by post-birth temporary sterility, associated with breast-feeding, is greater than that imposed either by marriage or by contraception.⁴⁵

An analysis of the determinants of breast-feeding carried out in the middle of the 1980s in a sample of Middle Eastern countries found that urban residence was the variable most associated with reducing the practice of breast feeding; it substantially lowered both the probability and the duration of breast-feeding.⁴⁶ Thus, during early stages of modernization, fertility might actually rise if declines in breast-feeding, induced by urbanization and other changes in women's activity patterns, are not balanced by increases in contraceptive use or a reduction in marital exposure.⁴⁷

Birth Control and Use of Contraception

Fertility transition is influenced by social and economic forces, which reduce the family size desire through a variety of mechanisms. Individual choices about family size can, however, become effective through fertility regulation, i.e. contraceptive use. Effective birth control is based on knowledge of contraceptive methods as well as on the use of these methods. Since fertility control has been well established throughout the developed countries for a considerable period of time, the knowledge of at least one method of contraception is virtually universal. UN surveys of the late 1980s found that, except for Africa and a few Asian countries, knowledge of at least one method was almost as high in the developing countries as in the developed ones.⁴⁸ In the Middle East, with the exception of the least developed countries of the region, the vast majority of married women were aware of contraceptive methods. At the end of the 1980s, contraception awareness in most of the Middle East was already 90 percent or more. The pill was by far the most widely recognized method, followed by the intra-uterine device (IUD). Contraception awareness showed little variation by age or socioeconomic characteristics.⁴⁹

However, these surveys found a substantial gap between the developed and the developing countries in the use of contraception. Even in developing countries of the high development group, where the family planning effort was strong, only 40 percent of married women reported use of a contraceptive method at the end of the 1980s. This compared to 60-80 percent and above in most of the developed countries.⁵⁰

The use of contraception by married women increased according to family size and women's family size preferences. Thus, in developed countries and in most of Latin America, the level of contraceptive use was highest among women with two children, while in most Asian countries the maximum usage rate was reached only after the third or fourth child.⁵¹

In the Middle East, use of contraceptives (at least once) varied substantially between socioeconomic groups. Urban residence and a higher educational level for women were the characteristics most associated with the use of contraception. Contraceptive use, at the end of the 1980s, was about 40-45 percent in major urban areas, and between 5 and 20 percent in rural areas (except for Yemen). The use of contraceptives, at least once, was found to be twice as high for women with education of seven years or more, compared to women with no education at all.⁵²

Relative Importance of the Determinants of Fertility

The relative importance of these factors varied substantially among developing countries according to their regional characteristics, state of development, and the relative strength of their family planning efforts. Marital exposure (i.e. the exposure to intercourse through marriage, measured by the age of marriage) was one means by which substantial reductions in potential fertility were achieved in the 1970s and 1980s in all groups of countries. In most cases, this factor was responsible for 35-40 percent of the total decrease. It was found to be especially important in the more developed group of the developing countries and in those with strong family planning programs. In the less developed countries and those without family planning programs (or especially weak programs), breast-feeding was responsible for more than 50 percent of the total reduction in fertility, while contraceptive use contributed only 10 percent. When a decline in breast-feeding duration occurred, this was accompanied by a rise in the age of marriage and in contraceptive use, often with a time lag.⁵³

The more advanced a country is on the development scale, the more important is the contribution of contraception. This was, by far, the most important factor explaining sustained decreases in fertility rates. Low levels of fertility have only been achieved as a result of the extensive use of contraception within marriage. Differences in levels of contraceptive use explain most of the variation in fertility.

Changes in fertility in the 1970s and 1980s were largely determined by the strength of the countries' family planning programs.⁵⁴ On average, an increase of approximately 15 percentage points (eg. from 202 to 352) in contraceptive use resulted in a decrease of one birth per woman.⁵⁵

The Influence of Social Factors on Fertility Trends

Demographic transition was initiated and driven by social forces affecting the direct determinants of fertility. Age of marriage and contraceptive use increased, as education and public health improved and as more people moved from rural to urban residence. Demographic research confirms the key role of economic development in the fertility transition and the "diffusion effect" of this process. Fertility rates and the desired model of family size begin to decline among the more educated, among urban populations, women who work in the modern sector, etc. Then, these phenomena gradually diffuse throughout the society, until the small family norm is broadly accepted.⁵⁶

Cross-country analysis reveals universal patterns that apply to this process in most of the developing countries. The most rapid declines in fertility have occurred in those developing countries that were characterized by a combination of substantial improvements in public health (especially in child survival), rapid increase in educational levels (especially of women) and widespread access to family planning services. On the other hand, in countries where child mortality rates remained high, gross female secondary education enrollment rates remained low, and the proportion of married women using contraception remained low, the total fertility rates remained as high as 6-7 per 1,000 and showed few indications of decline.⁵⁷

The Role of Economic Factors in the Decline in Fertility

The decline in fertility has been associated with later marriage and the increased use of contraception. Morocco was the first country to experience a consistent decline in fertility. Between 1973 and 1977 the fertility rate fell from 7.4 to 5.9 and it has continued to decline ever since. Between 1973 and 1977, the price of Morocco's main export – phosphates – collapsed on international markets and government income fell sharply as a result. The government reacted by increasing taxes and encouraging women to go to work in order to maintain family incomes. Between 1960 and 1980, the labor force participation rate of women aged 20 to 24 years rose from 10 percent to 37 percent. Changes of a similar order in fertility rates and female labor-force participation rates occurred in Saudi Arabia in the mid- to late-1980s, when oil revenues declined, and in Egypt from 1986, when rental income (income not derived

from work inside the economy) fell. Courbage has suggested that the decline of rents (first from phosphates in Morocco and later from oil and oil-derived income elsewhere in the region) was the main explanation for the decline in fertility.⁵⁸

Place of Residence – Rural or Urban

Fertility was higher in rural than in urban areas in all regions, at all levels of development and family planning effort. However, as developing countries advanced, fertility declines diffused into rural areas, and the differentials between urban and rural fertility rates declined.⁵⁹

In the Middle East, urban residence was consistently related to the level of fertility. Total fertility rates in urban areas were lower on average, in the late 1980s, than that in rural areas, by more than two children in Egypt and Tunisia, by more than three in Jordan and Morocco, and by more than four in Syria. The trend toward lower fertility in these countries started in the major urban areas in the 1960s. The diffusion of these trends to lesser urban areas and to rural areas was relatively fast in Egypt and Tunisia, and slower in Jordan and Syria. The size of fertility reduction in Egypt and Tunisia between the mid-1960s and the mid-1980s was 2-3 live births per woman in major urban areas, 1-2 in lesser urban areas and around one in rural areas.⁶⁰

The effect of urbanization on reduced fertility was closely but not entirely related to the level of female education. Allowing for women's education in the analysis of the factors affecting fertility rates, shows that place of residence is still influential. One reason for these differentials is the greater propensity of women in urban areas (at all levels of education) to use contraception.⁶¹

A major factor in the decline in urban fertility in the Middle East was the reduction of marital fertility. The main reductions were within the older age groups and in marriages of longer duration. More and more women in these groups decided that the current size of their families was satisfactory and that they did not want more children.⁶²

Education

Education affects childbearing through knowledge imparted. Communications skills acquired, in particular literacy, substantially alter the individual's conceptual frame of reference. As a result of this factor, female education was one of the most important variables in the explanation of changes in fertility rates.⁶³

Educational levels increase as a country modernizes. In the least developed countries, women with only a few years of education often have more children than those with no education at all. This occurs in situations in which increased fertility

due to reduced periods of breast-feeding outweighs the effect of initial efforts to use contraception. In the more developed groups of the developing countries, fertility rates drop consistently and substantially as education levels rise.⁶⁴

A uniformly inverse relationship between levels of fertility and women's educational status has been found, although the size of the differential is greater where a significant decline in urban fertility has occurred. The difference in birth rates between extreme (???) educational groups in the late 1980s, ranged from close to 5 births per 1,000 in Syria, to about 2 per 1,000 in Morocco. Education and residence were the most important factors in reduced fertility in most of the region.⁶⁵

Women's Employment

Women who worked at a modern type of occupation after marriage had lower fertility rates than women who were not economically active. This differential increased as the country's level of socioeconomic development rose.⁶⁶

Conclusion

At the end of the 1980s, the reproductive climate in the Middle East still favored moderate to high fertility. This was the result of a social organization in which children represented an important continuity in family tradition and in which childbearing was recognized as a major role for women.⁶⁷ In the 1980s, and more so in the 1990s, a notable diversity in family size preference and practice emerged. Such diversity was typical of a period of transition, in which reproductive behavior reflected the effects of both traditional and non-traditional factors.

Urban residence and education for women were associated with a substantially smaller family size, both desired and actual. Lower urban fertility was primarily the result of marriage at a later age, earlier completion of childbearing and longer intervals between births. Modern methods of contraception, most importantly the pill, were the main agent of change in urban fertility. In rural areas, traditional forces prevailed, dictating earlier marriage, a larger desired family size and low contraceptive use.⁶⁸

Socio-demographic Consequences of Demographic Trends

Age Structure and Economic Dependency Rates

The Middle East population is young: One of every three persons is under 15 years of age. This age structure results in a high dependency ratio. Since the young age structure is coupled with a low level of female participation in the labor force, the proportion of economically active persons in the population is lower in the Middle East than in any other region of the world. Thus, the economic dependency ratio (i.e.

the ratio of economically inactive persons to every economically active one) is the highest, compared to any other region of the world. In some Middle Eastern countries the economic dependency ratio is higher than two economically inactive persons to each economically active one.⁶⁹ This situation is projected to change drastically during the coming decades. According to the World Bank, the annual growth rate of the Middle East's young population (ages 0-14) is projected to be as low as 0.5 percent over the 1999-2015 period, as against an overall annual population growth rate of 1.8 percent.⁷⁰

Rapid Growth of Working Age Population

As the large young populations of the Middle East grow up, most Middle Eastern countries are starting to experience a rapid and accelerating rise in the growth rate of the working age population. An exceptionally rapid growth of working age population is projected for the coming two or three decades. According to the World Bank, the annual growth rate of the Middle East working age population (ages 15-64) is projected to be 2.5 percent over the 1999-2015 period – the world's highest except for sub-Saharan Africa.⁷¹

In Jordan, for example, the number of children under 15 years of age who are poised to enter the work force during the coming two decades is five times the number of persons in the 45-60 age group, who will retire during the same period. In Saudi Arabia this ratio is even higher, estimated at 8 to 1.⁷² These huge shifts in the age structure of the population will challenge Middle Eastern governments with a much greater demand for new jobs and housing and will require much larger investments in human resources, health care and other social services. Larger working age populations include larger numbers of women of childbearing age. The female population of the Middle East aged 15-49 will at least double over the next three decades. Availability of quality reproductive health services to this growing number of women is imperative if relatively high percentage of contraceptive use and the projected slowdown of population growth are to be achieved.

Old Age Population Growth

Changes in the age structure of the population present Middle Eastern countries with a new challenge: an increasing number of elderly persons. In Egypt, for example, the elderly population (60 years and older) was projected to grow by an annual rate of 2.7 percent over the period 1999-2015, compared to overall population growth of 1.5 percent. In Saudi Arabia, the elderly population is projected to grow by an annual rate of 5.5 percent over the same period, compared to an overall growth rate of 2.9 percent.⁷³

Urbanization

In the Middle East, as in other developing regions, the urban population is growing faster than the population as a whole, as the rapid growth of rural populations feeds an ever-growing migration to urban centers. The share of the urban population in UNESCWA countries increased from some 35 percent of total population in 1960, to 50 percent in 1980 and 60 percent in 2000. More than 30 million Egyptians lived in cities in 2000 (over 45 percent of the total population), some 18 million Saudis (86 percent) and a similar number of Iraqis (77 percent of total population).⁷⁴ The population of major Middle Eastern cities like Cairo or Istanbul is over 10 million, ranking among the world's 20 largest cities, and continues to grow rapidly.⁷⁵

The Demographic Challenge: Implications for Stability

Population growth and the aforementioned demographic trends are increasingly challenging Middle Eastern governments' ability to provide the basic needs of their citizens. The task of providing adequate housing, sanitation, health care, education and jobs, has become harder to achieve.

These challenges become even more complicated as more and more people demand improved standards of living and expect governments to show better results in combating poverty and in narrowing the gap between rich and poor. Moreover, governments have two new major problems to face. The first is the scarcity of water and other vital natural resources. The second is that emigration to the oil-rich states in the Gulf and to Libya and European countries, which served as an important outlet for the population pressures of poorer countries, has declined. Moreover, as Eastern European countries join the European Union, their nationals will be far better positioned to compete with Middle Eastern workers in the West European labor market. It seems that emigration opportunities will become even narrower and emigration may cease to be a significant social and economic factor

The consequences of these trends might be quite positive for those countries that commit themselves to investing in health and human resources and follow sound economic policies. When a large young population is healthy, educated, trained and can be absorbed into a developing labor market, the demographic problem turns into an economic advantage. However, the starting point is not promising: Middle Eastern states are struggling to provide for basic needs and are far from prepared for the challenges of the coming decades.

2

Economic Developments

Resources

The Middle East is unique among the regions of the world in having huge hydrocarbon reserves and very little water. The Nile and the Tigris and Euphrates rivers have provided the basis for intensive agricultural production for thousands of years and enabled these areas to become the cradles of civilization. The imbalance between hydrocarbon and water resources, however, has affected the region's development, the nature of its production and its relations with the rest of the world.

Water

The Middle East is by far the driest region in the world, and many states are seriously short of water. In 1996, the volume of freshwater per capita in the Middle East and North Africa was 854 cubic meters, just under 12 percent of the global average of 7,342.⁷⁶ Annual internal renewable water resources equaled 228 billion cubic meters (bcm) and a net 120 bcm were supplied by rivers flowing into the region. The total net annual renewable supply therefore came to 348 bcm. Annual water use was estimated at about 177 bcm, or 51 percent of supply, compared with a global use/supply ratio of only 8 percent. Renewable water resources per capita fell from 3,430 cubic meters in 1960 to 1,436 cubic meters in 1990. These figures excluded water supplies from natural, underground storage in strata dating from the remote past, known as fossil aquifers.⁷⁷ In the period 1980-96, agriculture accounted for 84 percent of water use in the region. During that period, about 28 percent of cultivated land in the region was irrigated: Worldwide, agriculture accounted for 68 percent of water use but, mainly because of greater rainfall, only 17 percent of cultivated land was irrigated.⁷⁸

The water table in much of the region is falling and this source is drying up.⁷⁹ Although desalination supplies significant quantities of water in the Gulf Cooperation Council (GCC) countries*, it is not suitable for agriculture because of the large

* Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates

quantities needed. In addition, because seawater has to be desalinated at sea level but usually is used at higher locations, costly pumping is required.⁸⁰ In 1991, almost 50 percent of the world's installed desalination capacity was in Arab countries, 56 percent of it in the GCC. In 1993, Arab countries had 4 bcm annual desalination capacity, equal to about 2.3 percent of annual water use.⁸¹

The minimum amount of water needed to support human life is 10 cubic meters a year. A reasonable supply is 40-80 cubic meters, but 150 cubic meters is the norm in developed countries. It has been estimated that by the year 2025, renewable water resources in Jordan, Libya, Saudi Arabia and Yemen will barely cover human needs. This assumes that all water resources are fully mobilized, even though not all the supplies can be mobilized at acceptable costs.⁸² Two-thirds of the Arab population relies on water supplies from rivers that flow from Turkey and Ethiopia. Twenty-five percent of them live in countries with virtually no perennial surface supply from rivers or rain.

The water crisis has forced radical policy changes. In the 1995 Saudi budget, a five-tier sliding scale of water charges was introduced, replacing a single rate system. Jordan has increased water prices and the government is looking for private investors to finance the water infrastructure. Under the terms of the Israel-Jordan Peace Treaty of October 1994, Israel agreed to supply Jordan with 50 million cubic meters of water a year. The two countries decided to cooperate in attempts to raise funds to build dams on the Jordan River for water conservation purposes.⁸³ Table 9 gives a breakdown of annual renewable freshwater supply and use in different parts of the region.

Table 9: Supply and Withdrawal of Annual Renewable Freshwater in MENA

	Maghreb	GCC	Arab Middle East	Non-Arab Middle East
Freshwater (m.cu meters)	49,020	3,724	258,867	387,172
Annual withdrawal (m.cu meters)	23,220	21,410	135,309	127,955
Withdrawal as % of renewable freshwater	47.4	74.9	52.3	33.0
Freshwater per capita (cu.meters)	678	129	1,659	2,559
Population in 1998 (m.)	72.3	28.9	155.4	151.3
Irrigated land (thousands of hectares)	2,661	1,777	10,820	14,305

Source: FAO, *The State of Food and Agriculture 2001*, (Rome: FAO, 2001)

Land

The other side of the water shortage is the aridity of much of the land in the region. The Arab states (including Mauritania) have a total area of 1,915 million hectares, of which only 130 million, or 6.8 percent, are cultivable. Sudan and Mauritania, the two poorest states, have 68 million, or 52 percent of the total cultivable area.⁸⁴ Aridity is the result of a low average amount of rain and the limited number of rivers in the region. Furthermore, rainfall is very uneven over time, with drought affecting parts of the region periodically. Rapid urbanization has resulted in the loss of agricultural land near cities and the conversion of topsoil into bricks, most notably in Cairo, something that Egypt, with a very unfavorable cultivable land/population ratio, could ill afford.

Rents

The Middle East is unique in that large proportions of income are not derived from work carried out inside the economy. Such incomes are referred to as rents, and they take several forms. The first is income from the sale of oil and gas. The cost of the labor and capital inputs required to produce oil in the Middle East is low compared with the price at which it is sold. The excess of income over those costs is rent. The cost of producing oil in the lowest-cost oil fields in Saudi Arabia is about \$2/barrel or less. A sale price of \$20/barrel therefore yields up to \$18 (80 percent) in rent; a sale price of \$30/barrel yields up to \$28, or 93 percent. In other parts of the region, costs are higher, so the rent is lower, but significant.

Another important characteristic of oil is that its price is very unstable and has been increasingly determined by international market conditions.⁸⁵ Table 10 shows how the real value of oil revenues in the major Middle East producers has fallen since the peak of 1980.

Table 10: Middle East OPEC Oil Export Revenues, 1972-2001 (\$ billion, 2000 prices)

	1972	1980	1986	2000	2001*
Algeria	5.5	26.3	6.2	11.0	10.5
Iran	16.8	27.2	8.8	23.6	22.4
Iraq	5.9	57.0	10.4	19.3	18.7
Kuwait	11.2	37.2	9.3	17.7	16.6
Libya	11.9	46.0	7.1	12.9	12.2
Qatar	1.8	11.1	2.1	6.7	6.2
Saudi Arabia	18.9	212.4	28.0	66.0	61.5
UAE	4.3	39.0	8.9	20.7	19.3
Total	76.3	456.2	80.8	177.9	167.4

Source: EIA, DOE and author's calculations

*estimate

Table 11 shows what has happened to oil export revenues on a per capita basis, also in constant prices. In 2000, the average level for the OPEC members in the region was 4 percent lower than in 1972. It came to just over one-fifth of its 1980 peak level and was only 50 percent above its 1986 low. In Saudi Arabia and Qatar, oil export revenues per capita in 2000 were just 14 percent of their 1980 levels, while in Iran they were 50 percent. In Kuwait they were 33 percent and in Iraq 19 percent.

Table 11: Middle East OPEC Oil Export Revenues per capita, 1972-2000 (\$, 2000 prices)

	1972	1980	1986	2000
Algeria	360	1,366	275	367
Iran	552	692	178	369
Iraq	586	4,315	646	828
Kuwait	1,333	27,153	5,167	8,850
Libya	5,535	16,667	3,365	2,218
Qatar	13,846	48,261	17,179	10,333
Saudi Arabia	2,877	22,668	2,096	3,188
UAE	12,647	38,614	14,375	6,655
Average	1,159	5,272	744	1,117

Source: EIA, DOE and author's calculations

Political Rents

Some of the poorer Arab states received large financial flows from abroad that were essential for ensuring their economic stability. These funds came from the oil-rich states of the Arab world and from governments outside the region. The best example of the rentier state was Jordan; other significant recipients were Egypt and Syria. Aid was bilateral and multilateral, civilian and military, and it took the form of loans, grants and debt write-offs. Between 1973 and 1989, the poorer states received an estimated \$55 billion in aid from Arab countries and multinational bodies.⁸⁶

Foreign aid declined from the mid-1980s for several reasons. First, Arab oil income declined, so there was less to give. Second, donors expressed dissatisfaction with the use to which the assistance was put, and cut their allocations. Finally, Western countries and multilateral bodies tied aid to economic reforms, the success of which reduced the need for external assistance.

In the Middle East, aid given on a concessional (i.e. with reduced interest rates or grace periods for repayment) basis represented a greater share of total aid than in any other developing region. In 1999, 38 percent of long-term debt in the Middle East was concessional, compared to 19 percent on average for developing countries. In Egypt it came to 86 percent, Jordan 54 percent, Syria 93 percent and in Yemen 92 percent.⁸⁷ In 1999, 57 percent of long-term net resource flows to the Middle East (excluding Turkey) was from public sector bodies, compared with 17.2 percent for all developing countries. This was due to the very low level of private sector inflows into the region: only \$1 billion in 1999, compared with \$219 billion for all developing countries. Aid and the rescheduling or cancellation of foreign debt can also be considered a form of rent.⁸⁸ Between 1979 and 1999, about \$60 billion of Arab foreign debt was rescheduled or written off, including nearly \$28 billion of Egyptian foreign debt that in turn included U.S. military debt.⁸⁹

Remittances

The growth of oil income resulted in the movement of workers from poorer countries to the oil-rich Arab states. In the period 1973-89, the remittances of workers to Egypt, Syria, Jordan and Yemen that were registered in balance of payments data came to about \$60 billion. Morocco and Tunisia received about \$24 billion from emigrants in Western Europe.⁹⁰ These funds helped to cover part of the large deficits on trade in goods and services. In the period 1990-98, remittances to Egypt, Jordan, Yemen and Oman (the latter were minimal) came to about \$58 billion. Those to Morocco and Tunisia totaled \$23 billion. Given the growth of these economies, remittances declined in relative importance, but remained a large absolute source of income that was not earned inside the economy. Total registered remittances received in the Middle East between 1973 and 1998 came to about \$165 billion, or \$6.6 billion a year. That was equal to nearly 5 percent of 1990 GDP in the recipient states.

Economic Growth

This section looks at growth trends in Arab countries and then outlines the main developments in Iran and Turkey.

Orthodox economic theory emphasizes that investment in physical equipment is the key to achieving economic growth. Arab countries have indeed invested heavily, but the economic performance of many of these economies has deteriorated. In 1981-85 an average of 27 percent of GDP was invested, but the economies of the region shrank by an average annual rate of 2.1 percent. This was both reflected in and caused by increased inefficiency in the use of investment. The incremental capital/output

ratio (ICOR) measures, at an aggregate level, the amount of capital needed to produce an extra unit of output. The ICOR increased in all the countries listed in Table 12, with the exception of Morocco.

Table 12: The Efficiency of Investment (ICOR = incremental capital output ratio)

	ICOR	
	1980-85	1985-90
Mashreq	4.3	6.8
Egypt	3.3	5.8
Jordan	8.8	10.7
Syria	9.6	12.5
Maghreb	6.7	13.1
Algeria	6.0	22.3
Morocco	7.1	4.7
Tunisia	7.2	8.4

Source: Ishac Diwan and Lyn Squire, *Economic and Social Development in the Middle East and North Africa*, World Bank, October 1992

Investment was dominated by the public sector, which responded to political rather than market signals. The private sector's role was much smaller than in other parts of the world. In Morocco and Tunisia, where it played a larger role than in other Arab countries, economic growth rates were higher.⁹¹

So-called endogenous growth theory has modified the emphasis on investment in physical assets in the orthodox model. It suggests that investments in human capital yield significant economic benefits. In the Middle East, however, much educational investment in the region has been misplaced, for two main reasons. The first was the lack of emphasis on basic education, resulting in high illiteracy rates. The second was a lack of use of graduates because of the failure of the economy and the private sector to develop satisfactorily, along with the inappropriate nature of much higher education.⁹²

The region has benefited from the availability of huge financial resources. An internal market for capital and labor was created in the mid-1970s. Labor moved from poor, labor surplus economies to capital surplus economies in the region. Economic theory would suggest that this was the right strategy for economic development, but the results have been disappointing, despite the fact that investment in infrastructure and education was considerable. This paradox can be explained by

the inefficient strategy chosen and the institutions that carried them out. These include the dominant role of the public sector in employment and economic activity, and trade and investment regimes characterized by high and uneven tariffs. These factors, together with high business transaction costs, impeded the process of diversification, the growth of non-oil exports and the attraction of foreign direct investment.

Another major problem since the first oil boom was management of the state's budget resources. More than half the MENA governments were direct beneficiaries of the dramatic growth in oil revenues. Budget revenues exploded to multiples of their pre-boom levels in the main oil exporters, and there were less dramatic but still significant increases in countries like Syria and Egypt. Government current expenditures rose even faster than income, led by the wage bill, subsidies and defense expenditure. Whereas expenditure on subsidies has fallen as a share of government expenditure and GDP in recent years, defense expenditure has remained high.⁹³

Table 13 shows that the relative economic performance of the region as a whole has deteriorated since the 1970s. There were two main reasons for this. The first was the oil boom that began in 1973. This generated huge incomes in the oil producing countries and increased GDP. It also enabled countries in the region that were small oil producers or not oil producers at all to expand without having to change their economic policies. When oil income declined in the mid-1980s, the diversified economies were forced to stabilize and carry out economic reforms, and this slowed the rate of growth. The key issue was how to restart growth and initiate structural change after the economies were stabilized. Stabilization was successfully carried out, but structural change proved much harder to achieve; as a result, growth was slow, although there was an improvement for the region as a whole in the early 1990s.

Table 13: The Middle East and Other Developing Areas: Annual average GDP growth rates (%), in real terms, 1970-98

	1970-80	1980-90	1990-98
Middle East	5.2	2.0	3.0
Latin America & Caribbean	6.0	1.6	3.7
South Asia	3.6	5.7	5.7
East Asia & Pacific	7.3	8.0	8.1
Sub-Saharan Africa	4.2	1.8	2.2
World	3.6	3.2	2.4

Source: Economic Research Forum for the Arab States, Iran and Turkey; Economic Trends in the MENA Region 2000

For many years, governments in the region followed an inward-looking economic policy that relied on public investment to lead economic growth. Since public enterprises were considered to be the main instrument of growth, most governments did not focus on creating a business environment conducive to private sector activity. Through state-owned firms, governments invested directly in manufacturing capacity, financial institutions and infrastructure, and dominated commercial activities. In oil-producing countries, investments were financed by the high oil revenues of the 1970s and 1980s, and in non-oil producing countries, by inflows of capital and remittances.

Alongside the state-owned firms, most MENA governments encouraged or permitted the growth of a private sector that was carefully protected from external and internal competition. They erected high trade barriers around the companies in this sector, subsidized their interest rates, favored them through procurement policies and allowed them a high degree of market concentration. The larger state-owned firms that coexisted with their smaller private counterparts also benefited greatly from this strategy.

Although liberalization programs and trade agreements meant that tariffs and quotas on imports were reduced in the late 1990s, they remained high in many Arab countries. Customs procedures and other forms of red tape took the place of tariffs and quotas as the main obstacles to imports. In 1997 Egypt, the average effective rate of protection (on value added) was 30.5 percent. Individual rates were highly dispersed: that on furniture was 84 percent, while that on wood was 6 percent.⁹⁴ Restrictions on imports made inputs expensive. This discouraged exports and limited the region's ability to take advantage of globalization.

The result has been economies with large public sectors, private sectors protected by high tariffs and, in most countries, smaller, informal private sectors that have emerged in a gray area outside government confines or between the public and private sectors. The informal sector is mainly comprised of small and medium-sized enterprises and other firms that want to escape high taxes and costly regulations, or that have been crowded out by state-owned enterprises.

Initially this economic strategy was successful. Fueled by oil revenues, it was often possible for economies to remain closed to competition and still deliver improvements in living standards. In the 1960s and early 1970s, the rate of growth of GDP per worker was relatively high. By the 1980s, the approach no longer worked; it failed to generate economic growth, employment or increases in the standard of living.⁹⁵

The performance of the private sector has also been disappointing. The desire of various governments to influence the direction and structure of economic activity,

along with their distrust of private companies, resulted in a highly controlled business environment with a mass of regulations and restrictions. Although the informal private sector has often generated a large portion of the region's growth and employment, it has had little access to formal sector markets, sources of finance or government support programs to help them expand.

The net results were deteriorating productivity, a large and inefficient public enterprise sector and underdeveloped financial markets. The fall in the productivity of overall investments discouraged much private investment. The rate of growth of GDP per worker declined and in some cases became negative in the years after the 1970s. Egypt's share of world trade, for example, remains only 3.0 percent.⁹⁶

Structural Change

There has been little structural change in the regional economy. In the period 1980-98, the countries listed in Table 14 experienced a fall in the share of mining, due to the drop in oil prices and an increase in services. The region went from reliance on extractive industries to dependence on services. It largely missed out on a key phase in economic development, the widening and deepening of the manufacturing base. The average figures for the four countries listed show that the share of manufacturing in GDP declined by half between 1980 and 1998.

Table 14: The Composition of GDP in West Asia, 1980-98 (%)

	1980	1998	1980	1998
	GCC		Diversified economies*	
Agriculture	1.0	4.2	10.9	15.5
Mining	62.4	33.8	39.1	19.3
Manufacturing	4.9	10.1	6.4	3.4
Construction	9.2	7.4	6.6	4.6
Services	22.5	44.5	37.0	57.2

Source: UNESCWA Survey, 1998-99

* Egypt, Jordan, Lebanon, Yemen

Iran

Iran's economic policies and performance in the 1980s were influenced by two major events: the revolution of 1979 and the war with Iraq, which lasted from 1980 to 1988. During the 1980s, the economy suffered a series of other shocks: trade embargoes and financial sanctions, the collapse of oil prices and severe natural disasters. Following the revolution, many skilled workers, entrepreneurs and large

amounts of capital left the country. The government stepped in to manage abandoned firms and properties and extended regulation of the economy to external trade, prices and distribution. Intervention led not only to economic distortions, but also to a significant slowdown in growth and to rising inflation. In the late 1980s, in the context of postwar reconstruction, Iran began liberalizing its economy and laying the basis for economic recovery.

Iran experienced relatively rapid, if uneven, rates of economic growth in the first half of the 1980s. In the period 1980-85, spurred mainly by growth in oil, agriculture and public services, real GDP increased by an annual average of 8 percent. Between 1985 and 1988, the economy declined at an annual rate of nearly 3 percent, due to the collapse of oil prices and severe damage to oil production and exports as the war with Iraq intensified.

Aggregate demand was supported by wage and employment trends, enabling private sector consumption to increase significantly. Economic controls, coupled with the expansion of public sector consumption and cheap credit, led to an inefficient use of resources, as the relatively low cost of traded goods encouraged the use of imports in consumption and production. The absence of corrective measures to reduce excess demand eventually led to accelerating inflation. Investment fell from around 20 percent to 12 percent of GDP between 1980 and 1989.

The performance of the key petroleum sector was seriously affected early in the Iran-Iraq War by the heavy damage to oil installations. As a result of the fall in oil production, the share of the oil sector in GDP decreased from more than 13 percent in the first half of the 1980s, to less than 5 percent in the second half. It recovered sharply when the war with Iraq ended. The share of industry in total output fell from about 19 percent to 14 percent during the 1980s, as a result of war damage and disruption, the loss of key manpower and shortages of foreign exchange, but also experienced a recovery when the conflict ended.

While the war affected the heavily import-dependent industrial sector, the large services sector suffered too, mainly as a result of damage to infrastructure, particularly transport and communications. Drought and the war affected agricultural production. The high priority given to this sector by the government, through preferential credit, extension services and subsidized equipment and inputs, helped to increase output growth. Despite high rates of population growth, food shortages were largely avoided, even at the height of the war.

The Islamic revolution brought about major structural and institutional changes in the economy. One of the most important aims of the Islamic regime was to create an egalitarian society. Foremost among the changes was the nationalization of banks,

insurance and service companies, as well as large industrial units. In addition, the ownership of many non-financial enterprises was transferred to a number of Islamic foundations (*bonyads*) established outside the government. Their main aim was to improve the living conditions of the poor.

During most of the 1980s, developments in domestic demand were heavily influenced by the need to accommodate the claims of the war, as well as adjusting to an increasingly difficult international economic environment. Reflecting these factors, domestic demand grew by 6 percent annually during the period 1980/81-1985/86 and declined by about 8 percent a year on average during the period 1986/87-1988/89.

Inflation accelerated to 30 percent per year in the second half of the eighties. Only in 1989/90, after the end of the hostilities, did inflation (as measured by the gross domestic product deflator rather than by the more narrowly based consumer price index) decline to about 14 percent, compared with 20 percent in 1987/88. By 1990/91 it had risen again to 18 percent, according to official estimates. Consumption and investment grew at about the same rate as that of total domestic demand over the first half of the 1980s. However, from 1985/86 to 1988/89, consumption fell by 7.3 percent per year while investment declined even more sharply, by 15.5 percent annually, with the brunt of the contraction occurring in the public sector.

In June 1990, a severe earthquake hit northwest Iran: 35,000 people were killed, half a million were made homeless and many thousands were injured. Large areas of irrigated land were damaged, as was a thermal power station. The cost of reconstruction was estimated at about \$5 billion.

The Iraqi invasion of Kuwait in August 1990 and the crisis that followed until the conclusion of the war in the spring of 1991 cost Iran up to \$3.5 billion, not including the cost of higher military expenditure. This included a \$1.7 billion increase in the cost of imported refined oil products and \$1.1 billion spent on refugees. The balance was spent on increased insurance and freight charges for imported goods. These were more than offset by higher oil revenues, which rose from \$12 billion in 1989/90 to about \$16.5 billion in 1990/91. As a result, GDP in real terms rose by 10 percent in 1990/91.

The share of consumption in GDP fell from 74 percent in 1980/81 to 66 percent in 1989/90, mainly due to the sharp fall in public consumption. During the same period, gross investment dropped from 21 percent to 12 percent. While the fall in private investment reflected growing uncertainty and constraints on the activities of the private sector (including the growing involvement of the public sector), the decline in public investment was due to the war and lack of foreign capital.

Although the population growth rate has decelerated rapidly in recent years, the labor force has increased by 4 percent a year. This meant that 700,000 people have joined the work force each year. In the period since 1997/98 the economy has grown by an annual average rate of 3 percent, which was too slow to generate enough jobs. With unemployment at about 16 percent, employment growth remained a major challenge.⁹⁷

Another problem was the massive distortions that the economy faced. The large public sector is subject to extensive state control, and quasi-state organizations known as bonyads control much of the economy without being answerable to parliament or the public.

Iran's economy, which was reliant on oil export revenues for about 80 percent of total export earnings and 40-50 percent of the government budget, was hit hard by low oil prices during 1998 and early 1999. From 2000, with the rebound in oil prices, the economy began to recover. In the financial year 1999/2000 (starting 21 March), GDP grew by 1.7 percent; in 2000, it was estimated to have grown by 5.2 percent and in 2001 by 5 percent.⁹⁸

In 2000, oil export revenues were estimated at \$23.2 billion, up 67 percent from 1999 and more than double 1998 revenues. To cope with its economic problems, Iran's government has proposed a variety of privatization and other restructuring and diversification measures. It also has set up a "stabilization fund" for above-budget oil revenues.

A sweeping critique of the management of the economy was made by one of Iran's most distinguished economists. According to Janhangir Amuzegar, the government has had neither a clear economic philosophy nor a credible economic agenda. The only blueprint – the Economic Rehabilitation Plan – announced after a year's preparation and input from many experts, was a list of well-known problems that were to be relieved by superficial remedies. Disjointed reform proposals were either not vigorously promoted by the government or blocked by the conservative-dominated Majlis (parliament) due to ineffective leadership. Furthermore, the side effects of the economic policies were not properly forecast at the time, and thus tended to aggravate already difficult economic conditions.

The Central Bank's efforts to service the foreign debt and arrears, against a background of declining oil revenues and declining foreign exchange reserves, were made at the expense of imports. Drastic cuts in foreign supplies in turn starved local import-dependent industries of inputs and resulted in increased inflation. Deflationary measures designed to keep consumer prices in check resulted in reduced private liquidity and further deflation. Allowing the currency to depreciate in order to cover

budget deficits and encourage non-oil exports undermined market confidence, squeezed private investment and encouraged capital flight. Disputes between economic officials on major policies (e.g., interest rates, exchange rates, and money supply) reduced public trust in the government. In the end, the president's main supporters – students, unemployed youth, women and intellectuals – had very limited praise for his administration's handling of the economy. They were hurt financially, since the benefits of modest economic growth were still consumed largely by the bazaaris, (private trade monopolists), the bonyads and others close to the regime.

There were also successes. External debt was reduced and budget deficits were financed through public borrowing instead of drawing on central bank credits. The rate of inflation was reduced. A number of oil and gas contracts with foreign energy companies were signed, and the World Bank resumed lending to Iran. Infrastructure improvements were made and some long-term projects were completed. These went almost unnoticed, however, because their impact on the daily life of ordinary people had not yet been felt.⁹⁹

In recent years, Iran's structural problems and its limited access to external financing has eased. During 1999-2000 the budget registered a surplus of 1 percent of GDP, compared with a deficit of 6.7 percent in the previous year. A budget surplus of 12.6 percent of GDP was estimated for the Iranian fiscal year 2000-01, which ended on March 20, 2001. The budget surplus (equivalent to \$8 billion) was allocated to the newly created Oil Stabilization Fund. Balance of payments constraints that marked most of the past decade have eased. A current account surplus of 4.3 percent of GDP was registered in 1999-2000, and a surplus of about 14 percent of GDP was estimated for the Iranian year 2000-2001, resulting from a trade surplus of \$14 billion, one of the largest ever. Foreign exchange reserves increased as a result. Inflation in 1999-2000 fell to less than 20 percent. While the rebound in oil prices and the beginning of reforms was beneficial, progress toward macroeconomic stability was due to more conservative fiscal policies and the consequent fall in debt stock and debt servicing. Fiscal sustainability was strengthened by the creation of the Oil Stabilization Fund and the official commitment to a balanced budget based on prudent projections of oil prices and revenues for the period of the current five-year plan. The fiscal situation was further strengthened by the improvement in the external debt profile. The annual total debt service, including short term debt service, fell to \$6.9 billion at the end of the 2000-01 Iranian fiscal year, compared to an average of about \$11.5 billion during the previous four years. The stock of foreign debt fell from \$22 billion in 1995-96 to about \$8.4 billion at the end of the 2000-01 Iranian fiscal year. The end of the debt crisis, which dominated much of the economic scene

in the last few years, is an important development for the Iranian economy.

According to the World Bank, Iran still faces major problems. The first is poverty, which has been dealt with through handouts and charitable transfers rather than by the generation of employment. Although subsidies and transfers reach the poor, Iran also maintains, often in the name of the poor, an expensive and excessively large implicit, untargeted and distorting subsidy system.¹⁰⁰

The social safety net and transfer system reached about 50 percent of the poor, about 4.5 million people. These programs included direct cash transfers, housing provision, education scholarships, and health and social security coverage. The network of mosques and other non-governmental institutions was one of the most important means of reaching the poor. Iran also has extensive and often large implicit subsidies, including those on energy, exchange rates, and credits. The energy subsidy was estimated at more than 12 percent of GDP in 2001.

Between 1970 and 2000 Iran's GDP rose by 218 percent, while the population increased by 221 percent. As a result, GDP per capita was almost the same in real terms in 2000 as it had been 30 years earlier.¹⁰¹ GDP per capita rose rapidly in the 1970s: the speed was disruptive and helped to destabilize the regime. Between 1977 and 1987 it fell by 60 percent as a result of revolution and war accompanied by massive population growth. Since 1987-88 there has been a recovery, though not continuous, and GDP per capita has reached its 1970 level; but it is still 40 percent below its 1977 peak.

Turkey

In January 1980, the government introduced a radical package of economic measures that have affected the economy ever since. The aim of the measures was to end the étatist policies that had been followed since the 1930s and replace them with much greater reliance on market forces. It was also designed to tackle the rapid inflation, stagnation and balance of payments problems plaguing the economy. At the center of these policies was import substitution, which had been adopted by right- and left-wing governments alike.¹⁰² The measures included a 33 percent devaluation of the lira against the dollar, a reduction in the number of exchange rates then prevailing and liberalization of the foreign trade and payments systems. Increased incentives were given for exports, large increases in the prices of goods produced by public sector companies were introduced and price controls were abolished. Tax reform proposals, plans to consolidate private sector debt and curbs on trade union activities were also announced. A deepening of political instability in Turkey and an increase in terrorism followed the introduction of these policies.

In September 1980, the military took over the government. The military government reduced the budget deficit from the equivalent of 10 percent of GNP in 1980 to 5.4 percent in 1981.¹⁰³ The annual inflation rate fell from 110 percent in 1980 to about 37 percent in 1983 and international financial bodies provided Turkey with about \$4 billion in aid. The early 1980s were years of very rapid export growth. In 1980-91, total exports, at an annual rate, averaged \$3.8 billion, of which \$1.7 billion (45 percent) were industrial goods. In 1982-85, total exports, at an annual rate, were \$6.6 billion, of which almost \$4.6 billion (70 percent) were industrial goods.¹⁰⁴ The increases in total exports, especially in industrial exports, were extraordinary by international standards. Although increased sales to Middle Eastern oil-producing states was part of the explanation, the change in domestic economic policy was also a major factor.¹⁰⁵ In the period 1977-84, productivity rose by 2.3 percent annually and the real wage rate fell by 10.4 percent annually. Wages as a share of GDP fell from 44.7 percent to 20.2 percent in that period. The sharp fall in wage costs was one of the major consequences of the new economic policies and led to an improvement in the competitiveness of manufacturing industry and other sectors.¹⁰⁶ This was made possible by military rule and by the very limited role that trade unions were allowed between 1983 and 1987. Many of the political and economic issues that dominated in the 1990s were the result of this freezing of distributional issues during the 1980s.¹⁰⁷

In August 1989, a reform of the capital account was announced; this moved the economy toward full currency convertibility and permitted capital movements in and out of the country. Turks were allowed to buy foreign stocks and foreigners were allowed to buy Turkish stocks. The freedom to borrow abroad was extended and many customs duties were reduced. High interest rates attracted capital into the country, and this permitted the government to maintain or expand its spending.

These measures were of profound importance because they opened the economy to capital flows, both short-term (hot money) flows looking for quick gains and longer term ones such as foreign direct investment. The extent of the liberalization was largely determined by the need for foreign financing to cover budget and balance of payments deficits. Other countries that liberalized their capital account transactions were less radical because they were not in such great need of funds.¹⁰⁸ The government under Turgut Ozal lost popularity between 1987 and 1989 and wanted to boost the faltering level of economic activity in order to achieve its political aims. The liberalization of the capital account enabled Turkey to import capital and thus finance a higher level of imports. It also increased the volume of funds available in the economy for investment. This helped to reduce interest rates and boost output growth and employment. These funds were mainly short-term, and when problems arose,

they were pulled out. This was one of the main causes of the financial crises of 1994 and 2000. The capital account liberalization has been criticized over many years as too rash, given Turkey's macroeconomic and political instability.¹⁰⁹ Although the Turkish economy grew by just under 4 percent a year in the 1990s, it was seriously affected by fiscal imbalances, chronically high inflation, and sharp business cycle fluctuations.¹¹⁰ Behind these factors lay serious political problems, including conflict with Kurdish separatists in the east of the country, rejection or delay in Turkish membership of the EU and tensions with Greece over Cyprus.

Widening socioeconomic divisions led to a polarization of the political system that in turn had negative effects on the economy. The latter included widening income gaps between different groups and the effect of massive migration. Hundreds of thousands left the areas of conflict in the east and moved to towns in the west. The main "beneficiary" was Istanbul, which grew enormously. The city's ability to provide employment, housing and other services was limited and the development of slums was accompanied by the rise of Islamic fundamentalism.

In 2001, Turkey suffered its worst economic crisis since 1945. A collapse in confidence at the beginning of the year led to a huge outflow of funds. Devaluation was forced on the government and interest rates soared. This, together with a restrictive budget policy, led to a fall in incomes, employment and domestic demand. Inflation reached about 60 percent a year at the end of 2001. As a result, GDP fell by 7.4 percent and in 2002 was forecast to increase by only 2.5 percent¹¹¹ Once again, the cost of liberalization without stabilization and the failure to carry out economic reforms proved high.

Employment

The Middle East has experienced rapid labor force growth rates. The current rate of growth is estimated at 2.7 percent a year. Employment needs to increase by at least 4 percent a year to cope with this growth, allow for increased labor force participation rates and reduce unemployment. The failure of the economies to grow at a sufficient rate, together with inefficient institutions and inappropriate policies, resulted in large-scale and rising unemployment. An extreme example is Algeria, where the labor force is growing by 3.7 percent a year and the working age population by over 2.7 percent. In order to halve the unemployment rate by 2015, employment needs to increase by 5 percent a year. For this to happen, the economy needs to grow by 6.5 percent a year.¹¹² Between 1980 and 1990 Algeria's GDP grew by an annual average of 2.7 percent and in 1990-98 by only 1.2 percent.¹¹³ The situation is more hopeful in

Egypt, Morocco and Tunisia because unemployment is lower and because the economies are more efficient than in Algeria.¹¹⁴

The labor market in most Middle Eastern states is dominated by employment in the government and public sectors, which are affected by low efficiency, over-employment, employment guarantees and a lack of flexibility. Bloated wage bills, despite low wages, have been major contributors to budget deficits.

During the period 1963 to 1997, growth in employment in the manufacturing sector ranged from high levels of 5.3 to 6.7 percent per year in Algeria, Iran, Kuwait, Morocco, Qatar and Tunisia. In the UAE, an increase of 16.4 percent reflected the shorter time period (1970 to 1985) that characterized the very rapid economic growth in the Gulf. A second group of countries experienced medium employment growth between the mid-1960s and mid-1990s: between 2.7 and 4.7 percent in Yemen, Egypt, Turkey, Iraq, Saudi Arabia, Libya and Jordan, respectively. Lebanon's record between 1963 and 1975 was only 1.6 percent and two countries, Oman and Syria, recorded negative employment growth. These trends show that manufacturing industry increased its labor force by between 2.5 and 4 percent per year. This contrasts with the limited capacity of both the agricultural and petroleum sectors in job creation.

In the 1990s, the share of civilian government employment in the Middle East averaged 17.5 percent, compared with 6-9 percent in other developing regions. The share of central government wages in GDP in the region was 10 percent, almost double the world average. Government administration has been responsible for creating the largest number of jobs in the economies of Algeria, Egypt, Jordan and the GCC (for nationals) over the last 30 years. Government recruitment policies for young graduates have created enormous distortions. These include declining productivity and deterioration in the quality of services provided by the public sector. It was also one cause of the erosion of real wages, made necessary by government spending cuts and the need to absorb more workers into the public sector. Spending on wages crowded out allocations for expansion and maintenance of utilities and infrastructure, including schools, hospitals and other social sectors. Distortions in the allocation of resources developed as a result of the supply-driven nature of government recruitment, with excess employment in occupations that were in low demand.

Massive over-employment in the civil service has been accompanied by reduced quality of services in Egypt and elsewhere. There has also been a trend of increased corruption and reduced accountability in administrative departments and social services where salaries are no longer large enough to permit a decent living standard.¹¹⁵

Unemployment

The increase in the number of workers was not matched by an equal increase in employment. During the period of high oil revenues in the late 1970s and early 1980s, employment was generated through regional migration and the expansion of the public sector and services. With the collapse of oil revenues and the implementation of stabilization and structural adjustment programs, employment growth slowed or became negative.¹¹⁶ As a result, unemployment increased. In 1994, a Western source estimated unemployment in the Arab world at 10 million (or about 10 percent of the labor force).¹¹⁷ The Arab Labor Organization estimated unemployment at 15 million. (or about 15 percent of the labor force) and stated that 2.5 million new workers join the labor force each year.¹¹⁸ These figures should be treated with caution, given the lack of comprehensive surveys, but they may understate real levels. Unemployment was high despite the fact that female participation in the formal labor force (i.e., outside the home) was one of the lowest in the world. In 1992, only 16 percent of all women were in the formal labor force, compared with an average of 35 percent in developing countries.¹¹⁹ Most of the unemployment was among first-time job seekers. In Egypt, guarantees of public sector jobs, part of the Nasserist legacy, had helped to keep open unemployment under control. With the implementation of reforms, this guarantee was phased out and new graduates had to wait years for a job.¹²⁰ In Morocco, unemployment in the first quarter of 1999 equaled 13.8 percent of the labor force. In urban areas, where the unemployed concentrated in order to look for work, they accounted for 28.2 percent of the labor force. In rural areas, which they left, they accounted for only 5.6 percent. Among those aged 15-24, the national unemployment rate was 40.6 percent; among 23- to 24-year-olds it was 42.3 percent.¹²¹ The high level of unemployment was partly due to the serious drought, but also reflected underlying weaknesses in the economy, which did not generate enough jobs.

According to projections made by the International Labor Office, the labor force in the Middle East will increase by more than 3 percent annually between now and the year 2015. This means that countries in the region will have to provide nearly 5 million new jobs a year over the next 15 years. Since unemployment rates are already among the world's highest (second only to Saharan Africa), this clearly indicates the formidable task ahead. (See Table 15)

Unemployment in the Arab world currently stands at between 15 and 20 million. Unemployment rates range from 10-19 percent in Oman, Egypt, Syria, Jordan, Tunisia, Bahrain, Morocco and Lebanon to as much as 25-30 percent in Libya, Algeria, Iran and Yemen. Unemployment rates among the young are much higher, especially in urban areas.

Table 15: Employment in MENA: target to halve unemployment by 2015 (Annual growth rates percent)

	Employment growth		Unemployment Rate
	Actual 1973-94	Required 2000-2015*	in 2000 (%)
Algeria	3.2	5.0	28.0
Egypt	1.4	3.6	12.0
Iran	2.6	4.1	14.0
Jordan	n.a.	4.4	15.0
Morocco	3.6	3.6	13.0
Tunisia	2.3	3.6	15.0

Source: Pierre Dhonte, Rina Bhattacharya and Tarik Yousef, Demographic Transition in the Middle East: Implications for Growth, Employment and Housing, IMF Working Paper WP/00/41, 2000

* allowing for growth of working age population, increased participation rates and reduced unemployment

Unemployment was compounded by lower productivity in half the countries in the region. In the period 1990-95, productivity declined in Kuwait, Algeria and Jordan, remained the same in Bahrain and Oman, and increased in Egypt, Tunisia and Morocco. Alongside the productivity decline, real wages also decreased substantially during the 1990s. Outside the GCC, real wages in manufacturing declined, on average, by about 2 percent a year over the period 1990-96. Algeria and Egypt registered the largest average drops in real wages in the early 1990s, but declines also occurred in Jordan and Tunisia during that period.

A related factor is the stage of demographic transition and the concomitant high rates of growth in the labor supply. During the 1970s and '80s, the region experienced the highest rates of population growth in the world. Fertility declines have now resulted in slower population growth, but it will take 20 years for this to translate into slower growth in the work force. In the meantime, countries in the region will have to contend with a rapidly growing number of workers seeking employment. On the other hand, the demographic transition may be a window of opportunity in which growing numbers of workers fuel higher economic growth. This was the case in East Asia during its period of high growth. Middle East labor force growth rates in the 1990s were the same as those in East Asia during the 1980s. The difference, however, is that real GDP growth in East Asia was double its labor force growth rate in 1970-80, while GDP growth in the Middle East was not significantly different from its labor force growth during the 1990s.

Future performance will depend on creating policies and institutions that can utilize the demographic window of opportunity. Increasing effective investment and economic growth rates will be key to enhancing labor absorption. In this respect, the role of government is to ensure that, while the drive to increase efficiency through adjustment programs continues, employment programs are well designed and informal employment keeps expanding. Though little is known about the behavior of informal wages over time, it is likely that these have fallen as the formal sector has become increasingly less able to absorb new entrants to the labor market.

The share of public enterprises in economic production remains high. While generally below 10 percent for middle income economies, it reaches more than 30 percent in Egypt and Tunisia and nearly 60 percent in Algeria. If figures on government employment and employment in public enterprises are combined, the share of employment of wage earners in the broader public sector reaches as much as 35 percent in Egypt, 50 percent in Jordan and almost 60 percent in Algeria.

Nevertheless, a series of adjustment and liberalization programs have been introduced that enhance the efficiency of many MENA economies by creating an enabling environment for market mechanisms and facilitate interaction in the context of globalization. Reforms are gathering momentum despite a slow start in the early 1990s.

Given the extent of government employment, efficient public sector downsizing required a large number of labor redundancies. In Egypt, the initial estimate for labor redundancies in public enterprises was around 10 percent, but in practice this figure proved to be closer to 35 percent. By 1992, the 14 largest public enterprises in Morocco had annual losses that reached more than 2 percent of GDP, and as a result, their labor force had to be cut. In Algeria, more than 500,000 employees were dismissed in the period 1990-98. However, there is still much restructuring of the large public sector to be done, despite the fact that the official unemployment rate is very high.

In addition to the rise in unemployment, there was a 30 percent decline in average real wages in the Arab world in the period 1985-90. In Egypt, the value of real wages in the public sector declined by 40 percent between 1981 and 1987. The fall was due to the decline in the demand for labor described above. The government increased public sector wages more slowly than the rise in prices. Reducing real wages was also an alternative to reducing employment. Public sector employment in the civil service was highly protected by legislation and by political commitments that made it difficult for governments to fire workers. These inflexible labor market arrangements had negative implications for productivity and real wages.¹²² In the period 1990-96, in Arab countries outside the GCC, real wages in manufacturing industry declined by 2 percent a year.¹²³

3

Socioeconomic Developments

Income per capita

Between 1980 and 2000, GDP per capita in the Arab states fell. The huge drop in oil income in the early 1980s was followed by only a moderate recovery, so in many of the oil-rich states, per capita income was lower in 2000 than in 1980.¹²⁴ Civil wars in Algeria, Lebanon and Sudan had major economic consequences. The figures for Sudan given in Table 16 are based on official data and do not reflect the reality of widespread destruction. The increase in oil income in recent years did, however, provide partial compensation.

Significant increases in GDP per capita were recorded in Egypt, although there was a slowdown after the late 1990s. The increase in GDP per capita was a function of economic growth and the slowdown in demographic growth.¹²⁵ Tunisia also benefited from reforms dating back to the 1980s, from one of the fastest and most stable economic growth rates in the region and from the slowest rate of population growth.¹²⁶

The most dramatic changes in GDP per capita occurred in Iraq. Between 1980 and 1990, Iraq's GDP rose by about 9 percent. However, since population increased by 43 percent, real GDP per capita fell by 24 percent. This was due to the effects of the war with Iran and the decline in oil prices.

In 2000, GDP came to an estimated 42 percent of its 1990 level. The population had increased by 25 percent, to 23.6 million, so GDP per capita was less than one third of its 1990 level in real terms. The collapse of income between 1990 and 2000 was due to the massive damage inflicted on the economy in the 1991 war and the subsequent effect of international sanctions.¹²⁷

Table 16: Index of GDP/capita, local currency, constant prices base (1980=100)

	1990	2000	2002
Algeria	98.7	95.8	97.9
Bahrain	102.8	112.3	115.5
Egypt	136.2	157.5	159.5
Iran	95.3	127.2	137.8
Jordan	79.5	87.8	90.9
Kuwait	49.0	68.0	65.0
Lebanon	51.7	84.3	84.3
Libya	46.7	46.4	45.2
Morocco	116.7	122.6	132.6
Oman	66.9	67.0	69.7
Qatar	41.0	64.7	67.0
Saudi Arabia	67.5	62.4	60.4
Sudan	92.8	123.6	124.8
Syria	89.2	111.7	116.6
Tunisia	111.2	150.4	157.0
Turkey	133.0	163.5	156.4
UAE	56.9	54.3	43.6

Source: Calculated IMF, World Economic Outlook Database, April 2003

The Human Development Index

Changes in income per capita do not, of course, fully describe or explain the human condition. Income measures should therefore be compared with improvements in other measures of human welfare. The human development index (HDI) provides such a measure. It summarizes three key variables that measure human welfare: life expectancy at birth, educational attainment and national income per capita. Educational attainment is measured on the basis of a weighted average of adult literacy (2/3) and combined gross primary, secondary and tertiary educational enrollment ratios (1/3).

In 1999, the Arab states had an average HDI of 0.648, compared with a world average of 0.716. Sub-Saharan Africa had the lowest HDI, 0.467 and the high-income OECD group of industrialized countries had the highest, 0.928. Four Arab states recorded what the UN described as high HDIs: Kuwait (0.818), Bahrain (0.824), the UAE (0.809) and Qatar (0.809). Eleven countries had medium HDIs, ranging from the highest, Libya (0.770), to the lowest, Morocco (0.596). Two countries had low

HDI: Yemen (0.468) and Sudan (0.439). Table 17 shows how the index improved in those Middle Eastern countries for which a complete series of figures is available.

Table 17: The Human Development Index, 1980-1999 and Literacy Rate* 1999

		HDI			Literacy	
		1980	1990	1999 (% change)	1980-99	1999
Middle East						
Saudi Arabia	(68)	0.651	0.707	0.754	15.8	76.1
Turkey	(82)	0.616	0.684	0.735	19.3	84.6
Jordan	(88)	0.637	0.677	0.714	12.1	89.2
Tunisia	(89)	0.566	0.640	0.714	26.1	69.9
Iran	(90)	0.563	0.645	0.714	26.8	75.7
Syria	(97)	0.593	0.647	0.700	18.0	73.6
Algeria	(100)	0.555	0.641	0.693	24.9	66.6
Egypt	(105)	0.479	0.573	0.635	32.6	54.6
Morocco	(122)	0.473	0.540	0.596	26.0	48.0
Comparators						
South Korea	(27)	0.729	0.814	0.875	20.0	97.6
Brazil	(69)	0.676	0.710	0.750	10.9	84.9
Indonesia	(102)	0.529	0.622	0.682	28.9	86.3
India	(115)	0.433	0.510	0.571	31.9	56.5

Source: UN, Human Development Report, 1999, 2001 and author's calculations The figures in brackets are the country's world rank

* 15 years +

Between 1970 and 1997, life expectancy increased by about 14 years, from 51 to 65. Infant mortality rates were more than halved, and mortality rates for children under five were reduced by nearly two-thirds. The Arab region was the first region in the developing world where most countries reduced mortality rates of children under five to the target of 70 per thousand by 1990, well ahead of the global target.

Regional averages hide wide variations and uneven progress among and within Arab countries. In general, oil-rich countries made rapid progress. Several countries from this group set world records in improving some social indicators. However, rapid progress was not limited to the oil-rich. Yemen and Tunisia were among the 10 countries that experienced the fastest improvements in the world in, respectively, raising life expectancy and reducing under-five mortality.

Between 1960 and 1992, the Middle East and North Africa experienced the second largest absolute increase in the HDI after East Asia. During the same period, Tunisia and Syria were among the top 10 performers in terms of the absolute increase in HDI values. Egypt, Jordan and Morocco more than doubled their HDI values and Yemen tripled them.

The Arab countries started their progress from a very low base, a fact that helps in understanding the extent of their human development achievements. These countries overcame severe difficulties in expanding their social services following independence. In 1960, between two-thirds and three-quarters of the population was illiterate. In contrast, when South Korea shifted its development strategy to export-led growth in the early 1960s, over 70 percent of the population could already read and write.

Despite progress and the great wealth of many parts of the region, problems of human deprivation and poverty persist. In 1997, about 13 percent of the population was not expected to survive to age 40; 54 million people lacked access to safe water; 29 million lacked access to health services and more than 50 million people were exposed to dangerously polluted air.

Regional estimates of the incidence of income poverty vary considerably. According to the World Bank, in 1994, 4 percent of the population of the MENA region, about 11 million people, lived in poverty, i.e. on less than \$1 a day (1985 constant dollars adjusted for purchasing power parity). Forty million people lived on less than \$1.67 per day (also 1985 dollars adjusted for purchasing power parity). Most sources agree that the number and proportion of poor people increased in the second half of the 1980s.

Income poverty seems to be less pervasive than human poverty, or deprivation in basic human development. Human poverty is about 32.4 percent for the region as a whole, according to the Human Poverty Index (HPI), which measures deprivation in terms of short lives, illiteracy and lack of basic services. Several countries have national poverty estimates. In the second half of the 1990s, national estimates of overall poverty ranged from 45 percent for Djibouti to 23 percent for Egypt. At 6 percent, Tunisia had the lowest incidence of extreme poverty among the Arab countries for which data is available. Women and children suffer the most. The maternal mortality rate is high and some 55 percent of women in the Arab world are illiterate, compared to about one third of the men. Fifteen percent of the region's children in the relevant age group do not attend primary school (ranging from 68 percent in Djibouti, 38-39 percent in Kuwait and Saudi Arabia, 28-29 percent in Oman and 20 percent in Qatar), and nearly 30 percent do not attend secondary school.

Many Arab countries have not effectively translated wealth and income growth into human development. The 1997 data show that the average value of HDI in Arab states, as a group, was 0.626. This value is considered relatively low compared to the world average, which is 0.706, or to the average of industrialized countries (0.919), or East Asian countries (0.712), or even compared to the average of developing countries as a whole (0.637). Moreover, levels of human development in Arab countries are typically lower than would be expected given their per capita incomes. The imbalance is reflected in HDI rankings that are much lower than rankings according to per capita income. The average per capita income for the region is significantly higher than that of the developing world average, while the average HDI value is lower. This shows that Arab states lag behind countries with comparable per capita income levels, and indicates the potential for using available income to enhance human development.

The potential is particularly evident in the oil-rich Arab countries. In these countries, the negative difference between the HDI and per capita income remains among the largest in the world, ranging from -6 for Libya to -47 in the case of Oman. The lag between income levels and human development levels and the potential for using available income to raise human development is also evident in poorer Arab countries.

The health indicator, as measured by life expectancy at birth, is higher in the Arab region (65.1 years) than in the developing countries group (64.4 years) and only slightly lower than the world average (66.7 years).

Literacy

The figures for literacy are very disturbing. In Egypt, the most populous Arab country, 45 percent of the adult population is illiterate. In Tunisia, the most developed of the non-oil economies in the Arab world, the figure is 30 percent; in Algeria, it is 33 percent. Even in the Gulf, where per capita incomes were relatively high, illiteracy is between 20 and 25 percent. In Sudan, the illiterate adult population reaches 43 percent, in Yemen 55 percent and in Morocco 52 percent. The contrast with South Korea and Indonesia is sharp, and at least four Arab countries have lower literacy levels than India. In 1999, literacy in the Middle East was about 60 percent, a major improvement over 40 years. In comparison with other parts of the world, however, the position was dismal: the developing countries' average was 71 percent, East Asia, 83 percent and industrialized countries, 99 percent.

Other indicators were positive. Combined gross school enrollments rose from 47 percent in 1980 to 58 percent in 1995. Daily caloric intake and access to safe water

and sanitation are higher than in any other developing region. Compared to other regions, the Arab states made the fastest progress in women's education, by raising women's literacy rates threefold since 1970 and by more than doubling female primary and secondary enrollment rates from 32 percent in 1970 to 74 percent in 1997.

The Labor Market and Poverty

The combined impact of high unemployment and declining wages described above has led to an increase in poverty together with a lowering of living standards. The incidence of poverty in Algeria is estimated to have increased from 12 percent in 1988 to 23 percent in 1995. In Egypt, poverty incidence is reported to have increased, but poverty estimates vary widely, depending on the definition of the poverty line. Lacking assets that can be used to support themselves, the unemployed fall below the poverty line. The urban labor market has a dual nature: formal and informal. The informal sector is characterized by ease of entry and low productivity, which explains why it has accounted for the bulk of job creation in recent years. Low productivity implies relatively lower wages, compared to the formal sector. Increasing urban poverty can therefore be explained by the growth of the informal sector.

Data on the distribution of expenditure shows that Arab countries had low inequality, with a Gini coefficient* of about 39 percent, second only to Asia, with a Gini Coefficient of 37 percent. These average results hide much variation between countries. The lowest inequality was reported for Egypt, with a Gini coefficient of 30 percent in 1991, followed by Morocco and Algeria with a Gini of about 39 percent each. The highest inequality was in Mauritania, with a Gini coefficient of 42.5 percent followed by Jordan (40.7 percent) and Tunisia (40 percent).

The Arab world has the lowest poverty measures. Asia follows in second place as the region with lowest poverty in terms of incidence and depth, but ranks first in terms of the depth of poverty. Africa is the poorest region according to all poverty measures, followed by Latin America. In the early 1990s, about 22 percent of the Arab population lived below a poverty line of \$51 per person per month. In comparison, 52 percent of Africa's population existed below a poverty line of \$42 per person per month. Among Arab countries, the highest incidence of poverty in the sample was recorded for Mauritania, where 39 percent of the population lived below a poverty line of \$33 per person per month. The lowest incidence of poverty was recorded for Egypt, with 14 percent of its population living below a poverty line of \$42 per person per month.

* a Gini coefficient of 1 means complete inequality; 0 means complete equality

The average income of the comes to \$34 per person per month in the Arab region, compared to \$23 per person per month in Africa and \$44 in Latin America. The lowest average income for the poor in Arab countries – \$18 per person per month – was recorded for Mauritania.

The Alternative Human Development Index

In 2002, the United Nations Development Program published a report on “The State of Human Development in the Arab World”.¹²⁸ The report, written by a group of Arab experts, stated that the HDI was not broad enough in scope. By including measures of political and economic freedom, social opportunities (measured by educational achievement rather than enrollment), gender empowerment, transparency guarantees and protective security, a more accurate picture of the state of development and the potential for development could be attained. The number of Internet hosts per thousand of the population was included as a measure of knowledge transmission, and carbon dioxide emissions per capita were included as an environmental measure. They called this the alternative human development index (AHDI). Table 18 gives the measures for Middle Eastern states and a few comparators.

The table shows that Middle Eastern states had low rankings according to AHDI criteria. All of them ranked lower on AHDI than HDI, with the exception of Morocco, which had the same ranking, because of very low rankings for political freedom and gender empowerment. (See Appendix 1)

Table 18: The Alternative Human Development Index*

	HDI ranking 1998	AHDI ranking 1998
Sweden	5	5
Canada	1	3
USA	4	11
South Korea	26	38
Turkey	56	67
Jordan	60	68
Kuwait	29	70
Lebanon	54	73
Morocco	79	79
Egypt	75	92
Tunisia	65	93
Algeria	68	97
Iran	63	101
Syria	70	103
Sudan	90	105
Iraq	80	110

Source: UNDP, The State of Human Development in the Arab Region, 2002

*The components of the AHDI are given in Appendix 1

4

Conclusions: The Political Economy of Growth

Despite the benefits of demographic transition and partial economic reforms, the region has experienced major problems in matching resources and their use. Although some of the diversified economies experienced impressive growth in the 1990s, the rate of growth was neither rapid nor consistent.

As a result, the economies of the region were unable to generate sufficient employment to absorb the increase in the labor force. The region needs to generate large numbers of jobs if its social stability is not to be threatened by large-scale unemployment. Although Europe needs millions of workers, the Middle East cannot rely on labor exports as a cure for its employment problem. Economic growth exceeding that of the population is essential if average living standards are not to fall.

However, even this is not sufficient. In the two decades that followed the oil price rise of the 1970s, the non-oil Arab states benefited from flows of funds that were used, in part, to support the poor, maintain employment in the public sector and thus reduce the inequality of income. With the decline of oil income and an increasing need for funds in oil-rich states, the flow of funds was drastically reduced and so was the freedom for maneuver. Rising poverty levels and increased income inequality have reinforced fundamentalist pressures. Reduced population pressure has not mitigated this because the number of young people has increased, causing pressures in the labor market.

Relatively rapid economic growth in Egypt in the mid-1990s was accompanied by increasing inequality in the distribution of wealth. Although national income per capita rose, many may well have become poorer as a result of unemployment or declines in real earnings. The processes of partial liberalization and reductions in government spending resulted in similar developments in other countries. Since 1999, Egypt has experienced slower economic growth, which has increased socioeconomic tensions. The same was true in Jordan, as the riots in Ma'an in November 2002 showed. In most parts of the world, the route to employment generation has been

industrialization. From the 1980s, Middle Eastern governments realized that they could no longer accomplish this directly; they lacked the resources, know-how and managerial ability to properly develop industry that could compete on world markets. Given the transparency required for reforms backed by the IMF and the World Bank, any significant increase in the role of government in the economy would have brought about a major loss of international confidence. The key question was whether the private sector was strong enough to take on the task that governments had abandoned.

In the Arab world, the private sector's weakness vis-a-vis the state and foreign competition was a major issue. The IMF, World Bank, WTO, the U.S. government and the EU have all called for the development of the private sector in Middle Eastern countries. However, at the same time, the protectionist international trade policy adopted by the EU and the U.S. adversely affected the exports of Arab states, thus making the private sector's task more difficult. It also discredited calls for reform in the region.

Arab economies were thus trapped in what may be called a low-level equilibrium, mainly because the sources of stability in Arab countries were also those of economic malaise. Three main factors were involved.

The first was rents. Between 1980 and 2000, the Arab states earned about \$2.5 trillion in rents (\$127 billion a year on average), 90 percent of which came from oil. This was possible with very limited economic activity: fewer than one million people were employed in the oil, refining and petrochemical industries. Oil revenues, along with foreign aid, went to the state or to the ruler, who allocated them among competing needs. This was a highly political process, carried out without public scrutiny in undemocratic systems.

The second was the political system. Dictatorships of various kinds, varying from the "bunker states" of Algeria, Iraq, Libya, Sudan, and Syria to the "bully praetorian states" of Egypt and Tunisia and the monarchies of Jordan, the GCC states and Morocco, all survived by force or the threat of force against their own citizens.¹²⁹ Large armies and high levels of military spending were an integral part of this enduring reality.

Egypt was one of the more open societies in the region. Nonetheless, the government made all the important decisions about the allocation of resources, with only very narrow consultation or democratic decision-making. This was the situation under Nasser and Sadat and it remained true under Mubarak.¹³⁰ The ruler's aim was not to produce economic growth, but to survive. If growth was the only way for the system to survive, then attempts would be made to encourage it, but if those steps threatened the stability of the system through a loss of governmental power, then

they were avoided. Thus, at best, economic policy merely muddled through in Egypt and elsewhere in the Arab world.

Third, the political system lacked checks or balances. One reason for this was the lack of a strong middle class. The late Egyptian scholar Nazih Ayubi called the Arab state “fierce” rather than strong.¹³¹ It was stronger than other groups in society, but its attempts to mobilize the society around development objectives were weak. Because of its undemocratic nature, the state has relied on force to obtain resources through nationalization and expropriation, rather than on taxation, which requires a more genuine representation. The prevalence of rents helped to sustain the state’s lack of accountability. Forces pushing for reform were therefore weak and the state, while not short of power, was unable and unwilling to use it as a galvanizing force in the development process.

For the Arab leaders, the issue was simple: the system worked in terms of ensuring political stability, defined as regime continuity. The decision not to undertake fundamental economic and political reforms was rational from the viewpoint of the regime. The need for reform has been widely recognized, but fears of instability in the region have made many hesitant in what they advocate and were prepared to implement. The middle class, which would benefit most from reforms, is weak and dependent on the state; it also fears that radical change would result in instability, thus undermining its position. The Middle Eastern countries examined here, with the exception of Turkey, therefore lack the forces for change that exist elsewhere and have played a crucial role in bringing about economic development.

Appendix 1

The Alternative Human Development Index: Component Indices*

	Education	Internet	Life Expectancy	Freedom	Gender	Pollution
Sweden	0.99	42.86	78.7	1.00	0.76	6.2
Canada	0.99	36.94	79.1	1.00	0.66	13.8
USA	0.97	112.77	76.8	1.00	0.62	19.7
South Korea	0.95	4.01	72.6	0.83	0.26	9.0
Turkey	0.76	0.73	69.3	0.48	0.23	2.9
Jordan	0.82	0.06	70.4	0.48	0.23	2.5
Kuwait	0.73	3.44	76.1	0.35	0.24	25.3
Lebanon	0.82	0.74	70.1	0.18	0.21	4.6
Morocco	0.48	0.07	67.0	.35	0.27	1.0
Egypt	0.60	0.04	66.7	0.17	0.24	1.5
Tunisia	0.70	0.00	66.7	0.17	0.24	1.5
Algeria	0.67	0.00	69.2	0.18	0.27	3.3
Iran	0.73	0.00	69.5	0.17	0.24	3.8
Syria	0.68	0.00	69.2	0.00	0.29	3.1
Sudan	0.48	0.00	55.4	0.00	0.22	0.1
Iraq	0.52	0.00	63.8	0.00	0.39	4.4

Source: UNDP, The State of Human Development in the Arab Region, 2002

* education, Internet hosts, life expectancy at birth, freedom scores = 1998; gender empowerment measure = 1995; pollution = 1996

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