4

The Demographic Challenge and the Role of Globalization

Problems in the Arab economies are frequently cited in the post-9/11 world, often with an undertone of urgency. However, as previous chapters have shown, while performance deteriorated to some extent during the 1980s and 1990s, for the most part the Middle Eastern economies have performed comparably to other developing countries, East Asia excluded, and basic measures of well-being such as life expectancy and infant mortality have improved despite the slowdown in growth.

That said, these economies face a looming challenge. Across the region, labor force growth of 3 percent or more is expected for the next 15 years. Productively absorbing these new labor entrants will not be easy. Already, despite the growth in real income per capita, data suggest a low growth of real wages in urban areas (table 3.8). The frequent grumbling about economic issues may be the result of low wage growth combined with high unemployment rates in general and the poor prospects for many more educated workers.[1] Educated and inoculated, the issue is finding work.

Employment generation has been a major concern of development economists for half a century (Lewis 1954, Ranis 1973, Baer and Hervé 1966)—the issues are hardly sui generis to the Arab world. One component of the

1. See, for example, the *Arab Human Development Reports* (UNDP 2002, 2003); "Rapid Prescription Needed," Al Ahram Online, September 19–25, 2002; and "Arab Reform, or Arab Performance?" *The Economist*, July 17, 2003. In the Palestinian elections of January 2006, a frequent complaint of those who voted for Hamas was the absence of employment and the need to bribe Fatah officials to obtain a government job. Simultaneously, members of Fatah held violent demonstrations after the elections, partly motivated by a fear of losing government employment.

solution to this looming employment problem would be more labor-intensive production, often channeled into exports, the engine that allowed some of the Asian economies to dramatically increase labor absorption in the 1960s and early 1970s.[2] Yet this Asian strategy may be more difficult to replicate than in the past because the world is now increasingly competitive, and many countries—China, India, some nations in Latin America, and the Eastern European transition economies—have moved into commanding positions in the production and export of low-cost, high-quality labor-intensive as well as technologically sophisticated commodities.

In this chapter we first present projections of the huge prospective increase in the region's labor force. We then calculate the combinations of investment and productivity growth rates needed to provide the necessary jobs. If jobs were created and output increased, then exports would facilitate the sale of the additional supply. We assess international trade performance in the next section and show how the internal policy environment in many Arab countries poses significant obstacles to trade, preventing these countries from globalizing as rapidly as the non-Arab comparators. This failure to globalize manifests itself in a variety of ways, among them the unimpressive manufacturing export performance of many of the Arab countries. This attenuated globalization is both a cause and an effect of the local policy environment, and we consider if national level soft budget constraints underwritten by a combination of aid, remittances, and energy-derived rents have enabled the Arab countries to temporize while others, less fortunate, initiated policy reforms.

To meet investment targets for employment generation, financial inflows to Arab economies will have to rise significantly and be sustained. The next section therefore looks at the current levels of and obstacles to such inflows—foreign direct and portfolio investment, which can constitute an important supplement to domestic saving, and other inflows such as oil rents, external aid, and remittances by nationals employed abroad, which augment domestic saving in many Arab nations. If investment is forthcoming, it will have to be allocated efficiently through the financial sector, so the next section assesses the state of the financial sector in the Arab economies, including the development of Islamic finance.

Demographic Changes

As shown in table 4.1, the countries of the Middle East have exhibited rapid, though slowing, population growth. On a regionwide basis, total fertility rates (total births per woman over her reproductive life cycle), which were once the highest in the world, have now fallen below Africa, equaling South Asia, and converging on East Asia and Latin America

2. DeMelo (1985) and Chenery, Robinson, and Syrquin (1986) provide numerical detail.

Table 4.1 Population growth (percent)

Country	1960–70	1970–80	1980–90	1990–2000	2000–2004
Middle East					
Algeria	2.4	3.1	3.0	2.0	1.6
Egypt	2.5	2.1	2.5	2.0	1.8
Jordan	6.0	3.8	3.8	4.4	2.7
Kuwait	10.3	6.3	4.4	0.3	2.9
Morocco	2.8	2.4	2.2	1.8	1.6
Saudi Arabia	3.5	5.0	5.4	2.7	2.9
Syria	3.2	3.4	3.4	2.9	2.4
Tunisia	2.0	2.2	2.5	1.6	1.2
High-performing comparators					
South Korea	2.5	1.8	1.2	0.9	0.6
Taiwan	3.1	2.0	1.3	0.9	0.4
Large comparators					
China	2.1	1.8	1.5	1.1	0.7
India	2.3	2.3	2.1	1.8	1.5
Normally endowed comparators					
Bangladesh	2.6	2.5	2.6	1.8	1.8
Brazil	2.8	2.4	2.0	1.4	1.2
Pakistan	2.8	3.2	2.7	2.5	2.4
Turkey	2.5	2.3	2.4	1.8	1.6
Resource-rich comparators					
Botswana	2.9	3.6	3.5	2.8	0.8
Indonesia	2.3	2.4	1.9	1.5	1.3
Nigeria	2.7	2.9	3.1	2.8	2.5
Venezuela	3.5	3.5	2.7	2.1	1.8

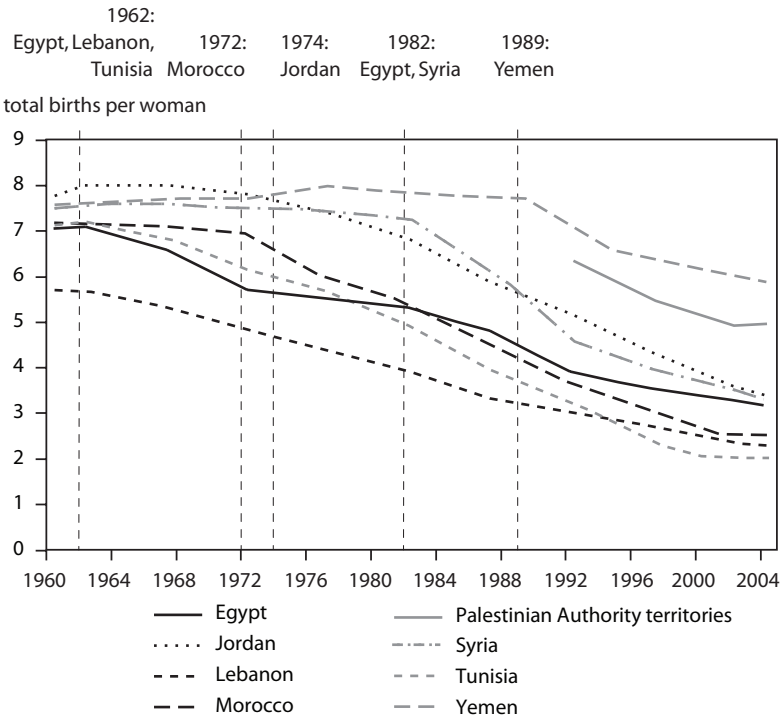
Note: Compound annual growth rates.

Source: World Bank, *World Development Indicators*, April 2006; *Taiwan Statistical Databook*, 2005.

(World Bank 2004a, figure 3.3). Infant mortality rates have fallen well below Africa and South Asia and now approach those in Latin America and East Asia (World Bank 2004a, figure 3.2). Table 4.1 shows that through the 1980s a number of Arab countries—Algeria, Jordan, Kuwait, Saudi Arabia, and Syria—had higher rates of population growth than most other countries with the exception of some in Africa.

These high rates of population growth are the product of multiple drivers: an initially high crude fertility rate, a rapid decline in infant mortality, and a general rise in life expectancy as documented in the previous chapter. Beginning with Tunisia in the early 1960s, the fertility rate peaked and began falling across the region at an accelerated rate in some countries (figures 4.1a and 4.1b). The movement from one steady state charac-

Figure 4.1a Initiation of fertility declines, normally endowed countries, 1960–2004

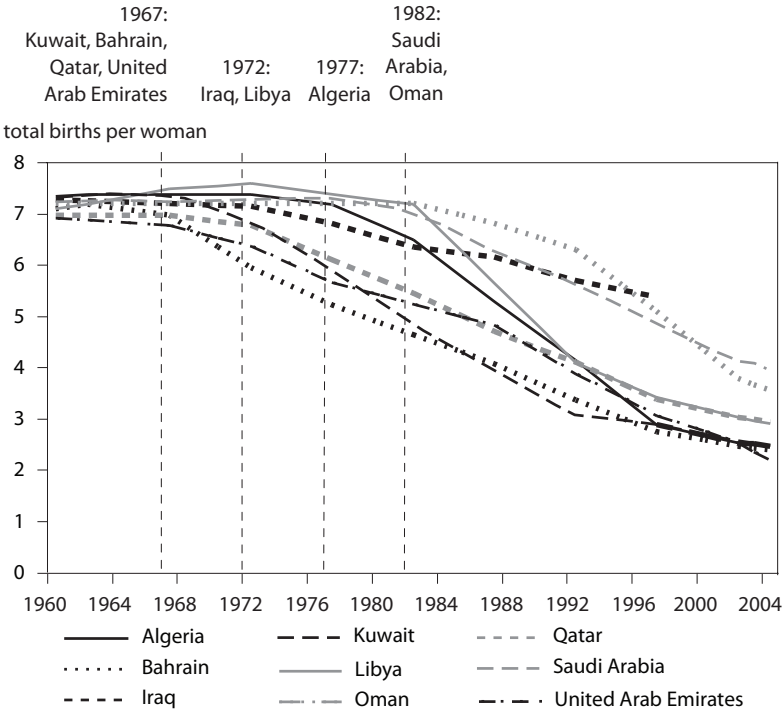


Source: World Bank, *World Development Indicators*, 2004, April 2006.

terized by high rates of births and deaths to a new steady state characterized by low rates of both births and deaths is known as demographic transition. Adjustment does not occur instantaneously however, and the interim period in which fertility rates have not fully adjusted to the new environment gives rise to an unusually large cohort bulge. The Middle East is in the midst of this adjustment, and the cohort bulge is now entering the labor force. One implication of this bulge is that the region has been characterized by extremely high, though declining, dependency ratios, the ratio of nonworkers to total population (figures 4.2a and 4.2b).

As noted earlier, authoritarian governments may have a particularly difficult time establishing credible policy precommitments. An example would be the provision of social security. Przeworski et al. (2000) make the interesting observation that one of the sources of differences in per capita income growth across democracies and authoritarian regimes is that, ceteris paribus, population growth is systematically higher under authoritarian regimes due to higher fertility rates, which could be due to much

Figure 4.1b Initiation of fertility declines, resource-rich countries, 1960–2004

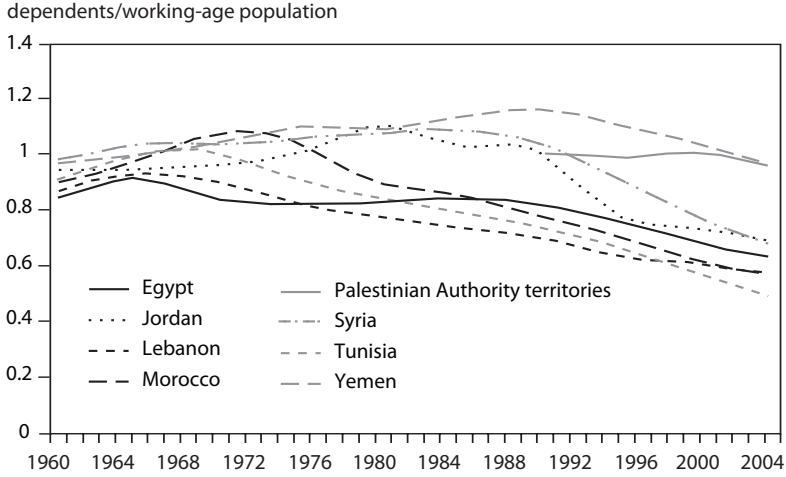


Source: World Bank, *World Development Indicators*, 2004, April 2006.

higher rates of contraceptive use in democracies. While contraception is far from universal, there is no Koranic injunction against birth control, and a majority of married women in most Arab countries use it (table 4.2). High fertility rates are more likely related to the demand for old-age support and the inability of authoritarian political regimes to make credible social security commitments. (The region indeed appears to be characterized by unsustainably large pension commitments [Robalino and Bogomolova 2006].) As a consequence people invest in the least risky asset capable of supplying that service—children.

In the Middle East, the absence of credibility in government commitments, together with a variety of subsidies aimed at buying off urban discontent, has created incentives for large families—children (preferably sons) are needed for old age support, while housing and other subsidies reduce the private costs of having children. While a large number of children may make sense as an insurance mechanism at the level of individual households, collectively it depresses saving and investment, slows productivity

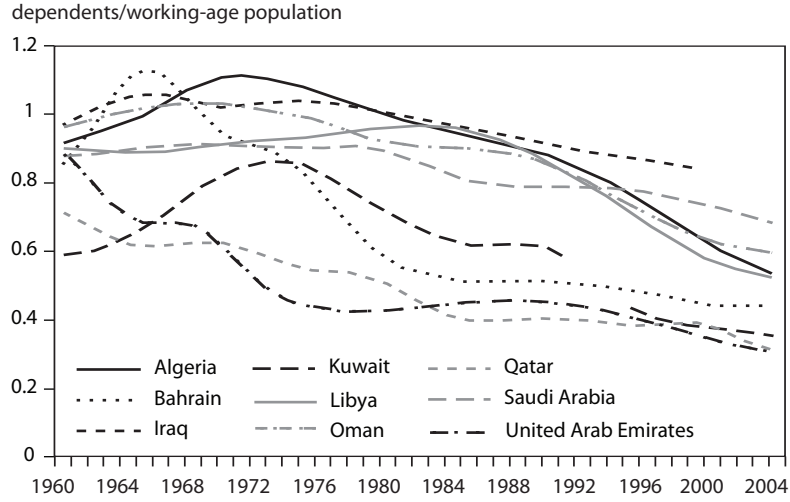
Figure 4.2a Age dependency ratio, normally endowed countries, 1960–2004



Notes: Ratio of dependents to working-age population.

Source: World Bank, *World Development Indicators,* May 2006.

Figure 4.2b Age dependency ratio, resource-rich countries, 1960–2004



Notes: Ratio of dependents to working-age population.

Source: World Bank, *World Development Indicators*, May 2006.

Table 4.2 Contraceptive prevalence rates among married women, 2002 (percent)

Country	Rate
Algeria	64
Bahrain	62
Egypt	56
Jordan	53
Kuwait	52
Lebanon	61
Libya	45
Morocco	58
Oman	24
Qatar	43
Saudi Arabia	32
Syria	40
Tunisia	60
United Arab Emirates	28
Yemen	21

Source: World Bank (2004a, table A.8(d)).

and income growth as it requires a higher percentage of investment to be devoted to social overhead capital, and contributes to underemployment and associated social maladies. This effect may well have been reinforced historically by low rates of female educational attainment (greater female education is associated with lower fertility) though, as shown in the previous chapter, female educational attainment has been rising rapidly in most countries in the region. When thinking about changes in per capita income, one tends to focus on income—the numerator in that expression—which indeed exhibits more short-run volatility than population. But one should not ignore population: In the long run, variations in population growth rates can have an appreciable impact on the secular trend in per capita income through their effect on the level of saving and the composition of investment.

Fortunately, compared with most economic variables, population changes are relatively predictable. Table 4.3 reports two sets of demographic projections adapted from the *Arab Human Development Report 2002*: Scenario one represents a relatively conservative set of assumptions about fertility changes, and scenario two embodies greater behavioral changes. In the first scenario, between 2000 and 2020, the region's population increases by 150 million or the equivalent of two additional Egypts. Even under the more optimistic assumptions incorporated in the second scenario, the region's population increases by 45 percent in 20 years.

Table 4.3 Population projections

	Total population (millions)						**Dependency ratio** (percent, based on scenario 2)			**Median age** (years, based on scenario 2)		
	Scenario 1			**Scenario 2**								
Country	**2000**	**2010**	**2020**	**2000**	**2010**	**2020**	**2000**	**2010**	**2020**	**2000**	**2010**	**2020**
Algeria	30	36	43	30	35	41	0.76	0.52	0.44	20	24	29
Bahrain	1	1	1	1	1	1	0.50	0.41	0.36	26	31	33
Djibouti	1	1	1	1	1	1	1.01	0.86	0.57	18	19	22
Egypt	68	84	102	68	79	91	0.73	0.53	0.46	20	24	29
Iraq	23	31	41	23	30	35	0.92	0.75	0.51	17	20	24
Jordan	5	7	9	5	6	7	0.78	0.68	0.50	19	21	25
Kuwait	2	2	3	2	2	2	0.45	0.39	0.37	27	32	34
Lebanon	4	4	5	4	4	5	0.88	0.51	0.47	18	23	28
Libya	5	7	8	5	6	8	1.09	0.64	0.45	15	20	25
Morocco	30	36	43	30	35	41	0.69	0.55	0.45	21	25	29
Oman	3	4	5	3	4	4	0.51	0.73	0.51	26	22	24
Qatar	1	1	1	1	1	1	0.41	0.38	0.33	27	33	36
Saudi Arabia	20	29	39	20	28	33	0.51	0.72	0.49	26	23	25
Syria	16	21	27	16	20	24	0.91	0.61	0.50	17	21	26
Tunisia	9	11	12	9	11	12	0.67	0.49	0.46	22	26	30
United Arab Emirates	3	3	3	3	3	3	0.29	0.33	0.38	30	36	41
Yemen	18	29	43	18	28	37	0.99	1.11	0.79	16	15	18
Arab region[a]	238	305	388	238	294	346				20	22.6	26.7

a. Excludes Comoros, Mauritania, Somalia, and Sudan. Median age figures are population-weighted averages.

Source: UNDP (2002, 144).

Table 4.4 Net migration (thousands)

Country	1980	1985	1990	1995	2000
Algeria	6.2	83.3	–70.0	–58.1	–184.9
Egypt	–750.0	–350.0	–550.0	–600.0	–500.0
Jordan	–79.8	69.3	75.2	494.6	35.0
Kuwait	154.6	102.1	174.1	–625.8	347.0
Morocco	–209.0	–50.0	–175.0	–300.0	–300.0
Saudi Arabia	870.1	1,400.0	1,120.0	–325.0	75.0
Syria	–125.0	–75.0	–45.0	–30.0	–30.0
Tunisia	–16.7	–12.4	–23.0	–22.3	–20.0
Total	–149.6	1,167.3	506.3	–1,466.6	–577.9

Source: World Bank, *World Development Indicators*, 2004.

Median population ages are projected to rise for the region as a whole from 20 years in 2000 to nearly 27 in 2020. The median age remains under 30 for most countries in both scenarios. This presents the region with both an opportunity and a challenge. One implication of the region's population structure is that the dependency ratio, which has been declining, should continue to fall. The youthful labor force entrants are, on the whole, better educated than their forebears. If these individuals are gainfully employed, the region could experience a demographic dividend, particularly a higher domestic saving rate.

Relatively high levels of cross-border migration complicate the situation, with most of the more typically endowed economies being net exporters of labor and the oil producers of the Gulf being net importers and with the magnitude of these flows (and status of the region as a whole) responding to changes in the price of oil (table 4.4). Thus, in 1980 at the height of one oil boom Egypt had net emigration of three quarters of a million people, the number falling by half as lower prices set in during the mid-1980s. Saudi Arabian flows also mirrored this change in fortune. In principle this pattern affords the governments of the Gulf the safety valve of increasing job opportunities for citizens through indigenization programs and the expulsion of guest workers.

The possibility of constraining in-migration in the Gulf may be limited by the lack of interest or ability of local citizens to do jobs currently performed by foreigners. And even if this were a serious option, it would simply underscore the vulnerability of the more labor-abundant sender countries of the region.[3] Yet the importation of labor is not limited to the

3. See Ibrahim (1982) for a sociological analysis of this pattern of intraregional migration from the perspectives of both the sender and receiver countries. The intra-Arab labor migration is mirrored by the remittances sent home by such workers. These have been, in different periods, a significant source of foreign exchange for Egypt and Jordan, whereas for Morocco and Tunisia remittances are largely from emigrants to Western Europe. See also Adams and Page (2003).

resource-rich economies of the Gulf. Even in Jordan, one of the "sender" countries in the intraregional labor market, considerable underemployment or unemployment among nationals has historically coexisted with the importation of labor from beyond the region. Workers from South Asia fill many of the jobs in the recently established qualified industrial zones (QIZs). Richard M. Auty (2001, 199), citing Ismail Serageldin, director of the Bibliotheca Alexandrina, writes "a generation has grown up within a dependency culture that is ill-suited to cope with the expected increasing exposure to market pressures. That generation lacks 'achievement motivation, vision of opportunities, sense of discipline, work ethic commitment, and self esteem' that one generation passes on to another in a motivation and progressive society."

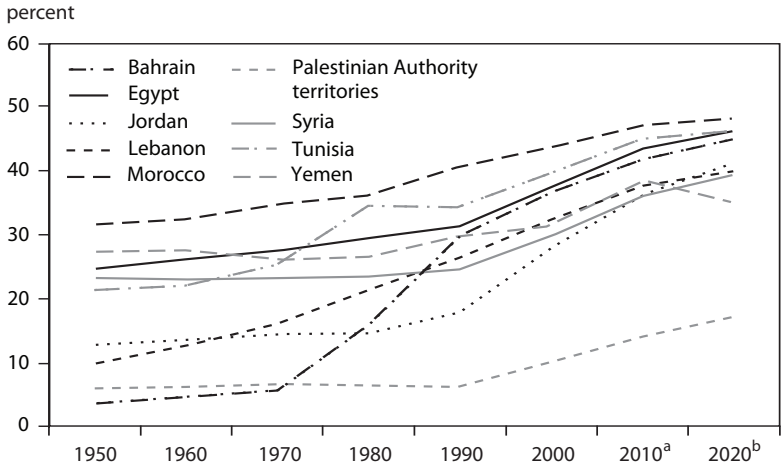
Such phenomena raise deep issues about the nature of the employment challenge the region faces. They suggest that the region not only has to generate jobs but also has to generate jobs of a certain type, which local residents would be willing to fill, at least under prevailing conditions. If the region cannot generate sufficient employment opportunities, it will experience a sustained period of high youth unemployment and underemployment with all the attendant social and political disruption. This is the crux of the challenge facing the Middle East.

Employment Generation and Productivity Growth

Labor force data are very unreliable for most developing countries, including the Middle Eastern countries.[4] The size of the labor force itself is often unknown given weak or nonexistent household surveys. Both employment and unemployment data are problematic. While unemployment figures are often cited in news stories in the Western press, many appear to have been obtained from local taxi drivers and waiters. Few reliable country sources exist. The World Bank's *World Development Indicators*, which collates country sources, provides only a few figures for unemployment rates for the Arab countries as does the International Labor Organization's major database, laborsta.ilo.org. A more informative measure of the potential unemployment problem facing the Arab countries is to use the more reliable census of population data, which as seen in the previous section indicates a rapid increase of the working age population. This growth in the labor force will be augmented by the steady increase in female labor force participation rates (figures 4.3a and 4.3b) as well as projected future increases underpinned by rising female educational attainment and urbanization (Gardner 2003).

4. This is true for the United States as well. In late 2003 and early 2004, the increasing discrepancies between household and firm surveys of employment led to major policy dilemmas. The former suggested considerable employment growth whereas the latter indicated a much more muted response to economic expansion.

Figure 4.3a Female labor force participation, normally endowed countries, 1950–2020

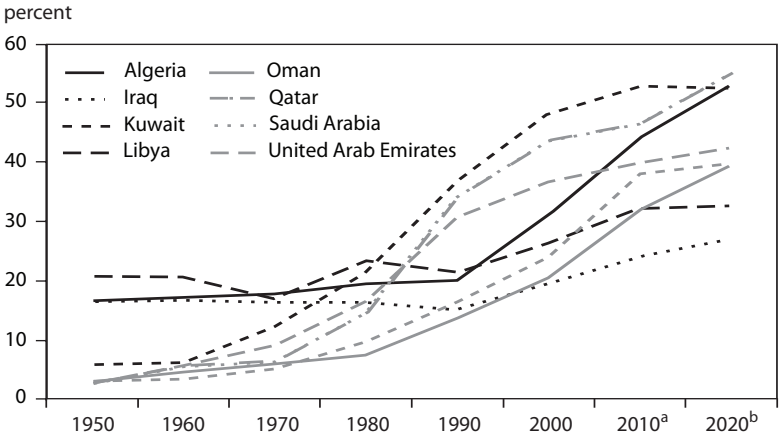


a. International Labor Organization estimates.
b. World Bank staff estimates.

Note: Ages 15 to 64.

Source: World Bank (2004b, table A3).

Figure 4.3b Female labor force participation, resource-rich countries, 1950–2020



a. International Labor Organization estimates.
b. World Bank staff estimates.

Note: Ages 15 to 64.

Source: World Bank (2004b, table A3).

Given the push to increase the female labor force participation rate, and the need to reduce the unknown but presumed very high current rates of unemployment or underemployment, the number of jobs created likely will have to increase by more than 3 percent per year for most countries. A World Bank study argues this increase is 3.5 percent, and another by the International Monetary Fund (IMF) concludes that it is 4 percent, but the precise number depends on unknowable changes in labor force participation rates by sex and age and the current unknown unemployment rates (World Bank 2004a; Dhonte, Bhattacharya, and Yousef 2000). We use the World Bank's 3.5 percent as a benchmark to illustrate the implications of what may well be a low estimate of required job creation and proceed with a simple calculation that illustrates the magnitude key variables must reach if unemployment is not to increase. In considering the implications of the need to generate employment, we also assume that job creation should be accompanied by an increase in the real wage of 2 percent annually. One of the complaints often voiced is that real wages have fallen in recent years, and there is some corroborating evidence, at least for the manufacturing sector (table 3.8).

Appendix 4A shows that the rate of growth of employment varies positively with the rate of growth of total factor productivity (TFP) and capital and negatively with the real wage. The intuition is that the growth of TFP and capital with which each worker is endowed makes each one more productive and increases his or her value to the firm, leading to more employment. Noneconomists often view productivity growth as detrimental to employment growth, as a given amount of output can be produced with fewer workers. While this may be true if demand is constant, as output increases, whether it is sold to domestic or foreign purchasers, employment will grow.

There is a close connection between job growth, capital accumulation, and productivity growth. Insofar as an absence of interaction with the world economy reduces total factor productivity growth, it slows not only the rate of growth of aggregate supply but also the growth of employment. Some analyses do not make this crucial connection, assuming that globalization is just one measure of an economy's performance. But as will be discussed below, the influx of technology—whether in the form of improvements embodied in foreign equipment, technology licenses, foreign direct investment, free transfers from foreign buyers, foreign consultants—is an important source of the growth of total factor productivity (Pack 1992). Solving the employment problem as well as increasing per capita income are intrinsically intertwined with globalization, and the absence of it, documented below, has been a major constraint on the growth of the Arab economies. Similarly, high levels of technological absorptive capacity, facilitated by specific types of higher education, are also critical to increasing the growth rate of total factor productivity, A^*.

Table 4.5 Alternative scenarios for labor force absorption

Scenario	*L**	*K**	*A**	Investment/ GDP	Implied growth of GDP
1	3.5	6.4	1.0	28.4	5.5
2	3.5	3.5	2.0	21.3	5.5
3	3.5	7.8	0.5	32.0	5.5
4	3.7	6.6	1.0	28.9	5.7

Assumptions: Capital share = 0.35; initial capital/output ratio = 2.5; depreciation rate = 5 percent; growth rate of real wages = 2 percent. See text for more information.

Source: Authors' calculations.

The assumption is that aggregate demand increases sufficiently rapidly to absorb the new output. On the other hand, the growth of real wages (given worker productivity) limits the additional profitable jobs that the firm can offer. This implies that the substitution of labor for capital, which would require lower real wages relative to the cost of capital, is precluded though in principle this substitution would be possible. Such substitution would also reduce the investment requirement, but we view a reduction in real wages as politically problematic for the countries in question given widespread discontent.

Table 4.5 shows a few combinations of variables that allow the realization of the desired rates of growth of 3.5 percent for employment, L^*, and 2 percent for real wages. K^* is the growth rate of the country's capital stock. It is assumed that the initial capital output ratio is 2.5 (reflecting the experiences of Algeria, Egypt, Jordan, Morocco, and Tunisia during 1995–2000), and the depreciation rate of the fixed capital stock is 5 percent per year. The calculations show that with TFP growth, A^*, equal to 1 percent per year, the required investment rate is 28 percent (row 1), dropping to 21 percent when $A^* = 2$ (row 2) and rising to 32 percent when $A^* = 0.5$. For employment to grow at 3.7 percent (to reflect the growing participation rate of women or the absorption of the existing but unknown pool of unemployed individuals, consistent with the IMF's higher labor force growth projection), an increase in the investment rate would be necessary.[5]

Many permutations of these simple calculations can be performed, but the basic point is that given the very high labor force growth rates, the hurdles for these economies to overcome are very substantial. These economies could raise their investment/GDP ratios, but it requires a very large

5. The required increase in the investment rate suggests one of the ambiguities of the often-asserted need to absorb more women in the labor force. While absorbing more women may be socially desirable, it must be accompanied by increasing saving and thus lower current consumption to allow them to be absorbed productively.

reduction in consumption in the short term. From this perspective the value of accelerated TFP growth resides not only in the "free" economic resource it offers, forestalling the need to suppress consumption, but also by extension it relieves some of the pressure on the political system to choose among competing demands for scarce resources.

TFP growth is thus critical and depends on many factors discussed more thoroughly in chapter 6. The economies considered here are not at the technological forefront of the sectors in which they are active. Productivity could be improved by intensive interaction with other nations including tapping of foreign knowledge through technology-licensing agreements, foreign direct investment (FDI), and use of foreign consultants. Greater competition, particularly from imports, would foster TFP growth as might privatization of large-scale, inefficient state-owned enterprises, which with the proper regulatory regime could be run more efficiently by the private sector without yielding excessive profits to the new owners. Similarly, greater flexibility in labor markets would be conducive to TFP growth. Many of the potential sources of improving productivity are inextricably linked to globalization—greater participation in the world economy. While many domestic actions can augment productivity, from improved infrastructure to reduction of arbitrary monopolies, some such as greater FDI are by definition a component of globalization. Behind the value-free and seemingly innocuous A^* in equation 4A.3 lies a set of activities that an economy needs to undertake to accelerate growth.

As shown in chapter 2, countries such as Jordan and Algeria had negative TFP growth in the 1990s, and one suspects the same is likely to have been true of countries such as Syria, Kuwait, and Saudi Arabia for which the requisite data are not available. In these nations, the investment requirements to absorb the rapidly growing labor force will be exceptionally high, as they had very high population growth in the 1980s, though some reductions in the 1990s. Even in the case of the oil exporters of the Gulf Cooperation Council (GCC), not considered here but often viewed as a model, simple job creation may not be enough—they have to be jobs that nationals are prepared to take.

Viewed through the prism of the arithmetic relations of income and employment growth, the focus on the necessary economic reforms in the Arab countries that are needed to improve efficiency and globalization can be viewed not solely as an argument about how to achieve greater efficiency. For governments concerned with legitimacy that might accrue from increased economic growth including improved consumption levels, reforms conducive to more effective economic performance offer an alternative to unpopular policies that compress current consumption. Alas, there is no truly free ride for policymakers. Liberalization of foreign trade or the privatization of state-owned enterprises, which might improve TFP growth relatively quickly, generate fierce opposition from groups that have a well-developed sense of their own risks, opposition that can be overcome only

by extraordinary political consensus, sometimes born out of trauma (post-Soviet Central Europe or Latin America following its "lost decade") or faced down by authoritarian governments. Neither the political threats posed by threats to rents nor prospective reductions in consumption growth rates can be taken lightly, and indeed in chapter 6 we review survey evidence of widespread opposition to these policies in the Middle East.

In chapter 6 we also discuss the possibilities for realizing higher productivity growth. These are very complex and have long gestation periods. In contrast, it is technically possible to increase national saving rates—the Singaporean mandatory pension contribution scheme providing an interesting and successful example. But the suppression of consumption in a highly volatile political atmosphere is clearly problematic (Romania under Nicolae Ceauşescu, an example with which some Arab leaders are undoubtedly familiar given their extensive interactions with Eastern Europe before the collapse of Communism).

Thus there is a need for greater domestic saving to finance investment and/or greater productivity growth, neither of which will be easy to achieve given the deep political uncertainty characterizing many of the region's regimes, concerns over terrorism, and uncertainties about the future price of oil. If such saving and investment were to materialize, and both the capital stock and employment grew more quickly, one implication is that aggregate output would also increase more rapidly, its precise rate of growth being dependent on TFP as well. The last column of table 4.5 shows the implied rate of growth of aggregate supply under the various assumptions. The aggregate growth rates are 5.5 to 5.7 percent per year, reflecting increased capital accumulation and/or faster productivity growth. While it is possible to implement a monetary-fiscal policy that would permit sustained growth in aggregate demand of this magnitude, a domestically oriented economy will have greater difficulty doing so than one with growing exports. Increasing a small country's share of the huge world market by .1 percent per year can generate a rapid growth rate in exports over a long period. It is considerably more difficult to pursue a domestically oriented growth strategy that stimulates growth rates in demand of this magnitude without quickly encountering diminishing returns especially in the relatively small countries (other than Egypt) of the Middle East. Moreover, GDP growth of 5.5 percent or more per year will necessitate considerable amounts of imported intermediate and capital goods, and the commensurate growth in foreign exchange. These considerations imply the need to consider recent export performance in some detail.

International Trade Performance

In the Arab countries, production of labor-intensive manufacturing goods could provide some of the necessary employment growth. Yet countries

cannot simply produce large quantities of these goods for a purely domestic market. They could try a "big push" strategy in which simultaneous expansion of output of many industries would provide sufficient growth of demand so that the complementary income elasticities would prevent diminishing returns. But such diffuse growth is technically difficult in many industries at once—certainly in nations with relatively little industrial experience. It is difficult to imagine a large economy like Egypt successfully pursuing this development strategy; it is virtually impossible to conceive of a smaller one like Syria or Tunisia doing so.

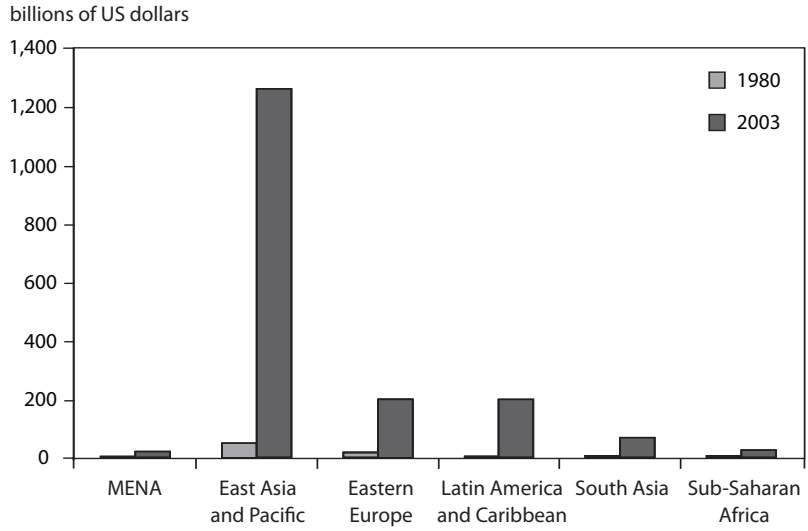
Exports permit economizing of relatively scarce industrial expertise as well as providing a vent for surplus for a rapidly growing labor force. If nations attempt a more domestically oriented growth strategy instead of export growth, they are likely to run into diminishing returns to capital, and the resulting decline in rates of return will discourage the continuation of high investment. In the "miracle" economies of Asia, perhaps the main miracle was the maintenance of a high rate of investment and its relatively efficient absorption, which may not have transpired with a domestically oriented big push. Even if a government possesses the considerable skills necessary to successfully follow a disciplined fiscal policy combined with a monetary policy that leads to low interest rates to encourage investment, the effort will founder due to the skill constraints encountered if a nation enters many industries simultaneously. Moreover, export growth is also needed to finance increased imported intermediates and capital goods.

Outside the petroleum sector, the Arab countries have, however, been largely inward looking since World War II and more importantly since 1970 in terms of manufacturing. Obviously oil and related exports have been increasing, but these have limited labor inputs and often form an enclave within the economy that has few production-side benefits though obviously incomes are higher.

Although nonoil trade exceeded the world average in the 1950s, it has fallen steadily since (World Bank 2004b). There is some evidence that Arab countries have "undertraded" both intra- and extraregionally relative to gravity model–derived norms and that this deterioration in performance has worsened over time (Al-Atrash and Yousef 2000, Nugent 2002, Miniesy and Nugent 2004, Bolbol and Fatheldin 2005). Figure 4.4 and table 4.6 show the level of manufacturing exports in current dollars for 1980 and 2003 or 2004 respectively for our benchmark countries.[6] Clearly this was an astoundingly open period for countries increasing their participation in the world economy. In the early 1960s the level of per capita income in Egypt, South Korea, and Taiwan was virtually identical, but the latter two quickly pulled ahead leaving Egypt a generation

6. Data for many individual countries are available for 2004, though regionwide data are not.

Figure 4.4 Manufacturing exports, 1980 and 2003



MENA = Middle East and North Africa

Source: UN Comtrade database, August 2005.

behind. In 1980 each of the Asian countries already achieved exports of manufactures more than eight times that of Egypt today. And although Egypt has a population greater than South Korea's and Taiwan's combined, the Asian countries export more manufactures in two days than Egypt does in an entire year. East Asia as a whole increased its exports of manufactured goods from $48 billion in 1980 to nearly $1.3 trillion in 2003, while Latin America and the Caribbean increased theirs from $3 billion to $198 billion over the same period (figure 4.4). The Eastern European transition economies increased their manufacturing exports from $16 billion to $198 billion between 1990 and 2003, while the traditionally inward-looking South Asian nations increased their manufactured exports by $63 billion during the same period.

In contrast, both the absolute size of Middle Eastern manufacturing exports and the growth after 1980 (that is, after the oil price increase) were very small, and today manufacturing exports from the region lag far behind Eastern Europe, South Asia, and Latin America, and indeed in 2003, the most recent year for which regionwide data are available, sub-Saharan Africa (figure 4.4). Some of this pattern is due to the pull into the extractive sector of capital and labor that might otherwise be deployed in manufacturing and the expansion of the nontraded-goods sector, underwritten by rents derived from the exploitation of natural resources, which would also draw productive factors away from manufacturing.

Table 4.6 Exports of manufactures, 1980 and 2004
(billions of current US dollars)

Country	1980	2004
Middle East		
Algeria	0.04	0.65
Egypt	0.33	2.35
Jordan	0.21	2.79
Kuwait	2.04	1.11[d]
Morocco	0.59	6.72
Saudi Arabia	0.70	8.88[e]
Syria	0.14	0.56
Tunisia	0.79	7.51
High-performing comparators		
South Korea	15.68	233.99
Taiwan	17.99	171.55
Large comparators		
China	12.46[b]	542.20
India	5.03	55.05
Normally endowed comparators		
Bangladesh	0.51	7.30
Brazil	7.49	52.19
Pakistan	1.28	11.42
Turkey	0.78	53.60
Resource-rich comparators		
Botswana	n.a.	2.22[d]
Indonesia	0.50	40.55
Nigeria	0.02[a]	0.47[c]
Venezuela	0.33	3.98

a. 1981
b. 1984
c. 2003
d. 2001
e. 2002

Sources: World Bank, *World Development Indicators*, April 2006; *Taiwan Statistical Databook*, 2005 (Exports of Industrial Products).

Yet manufacturing exports, in contrast to natural resources, are likely to generate productivity gains due to learning and be labor intensive. While it can be argued that comparative advantage in oil products and the foreign income including remittances that has accrued to these countries imply that manufactured exports should not be high, this exceptionally low level seems surprising. For example, Indonesia, which has a total population similar to the eight large Arab countries and has considerable natural resources in addition to oil and thus might have suffered from "Dutch disease," had a total of $40.5 billion of manufactured exports in 2004, up

from $500 million in 1980 (table 4.6). By 2003 the Arab countries had fewer manufactured exports than the Philippines, though Egypt and the Philippines have a similar population. These comparisons also suggest one of the problems of the Middle East. Not only is it late relative to China, it is now faced with competition from a whole range of countries, some of which have similar wage levels but comparable or better education systems as noted in chapter 2.

The volume of trade not only has been unimpressive but also heavily concentrated in fuels. Even within nonfuel products, exports are relatively concentrated, though there is no real standard or norm for judging the optimal degree of concentration, and in some circumstances this concentration could be interpreted as efficient specialization according to comparative advantage. However in the case of the Middle East and North Africa (MENA), there appears to be some evidence that nonfuel exports are relatively concentrated in slow-growing products (World Bank 2004b).

The level of intraindustry trade (IIT), even among the resource-scarce economies, is also modest relative to comparators from outside the region (World Bank 2004b, table 2.7). One interpretation of this phenomenon, based on the traditional demand-preference–driven motivations, is that it reflects the relatively low levels of income in these countries and the lack of convergence in income levels as discussed in chapter 2 (IIT typically rises with income and partner income similarity). MENA countries have little IIT because their relatively poor populations have relatively low demands for sophisticated differentiated products.

But there is a more worrisome possibility based on more recent ideas about the supply-side drivers of IIT, namely that a significant component of IIT consists of cross-border movements of components associated with global production networks and intrafirm trade. Under this interpretation, the region's low level of IIT reflects its relative lack of participation in these trends. Some evidence on this can be adduced from table 4.7, which reports evidence on the breadth of linkages derived from the World Economic Forum's *Global Competitiveness Report 2005–2006*. This sort of evidence should not be regarded as dispositive, but suggestive. Across the sample, the Middle East is in the middle of the pack. Among the Arab economies, Tunisia consistently scores better than the others on these indicators. There is a tendency for the more resource-extractive economies (Algeria, Kuwait, Qatar, Botswana, Indonesia, Nigeria, and Venezuela) to score low on these indicators. Indeed the wording of the "value chain" question, which focuses on exporters' nonproduction activities (design, marketing, and after-sales services), makes it almost a tautology in the case of the natural resources exporters. Yet the scores could also be interpreted as documenting the United Arab Emirates' uniquely successful transition away from a purely extractive economy.

Setting these resource-abundant nations aside to concentrate on more typically endowed economies, the Arab economies consistently score

Table 4.7 Exporting and backward linkages (percentile)

Country	Value chain presence	Local supplier quantity	Local supplier quality	Local availability of process machinery	Local availability of specialized research and training services
Middle East					
Algeria	1	33	20	24	17
Bahrain	27	38	51	11	15
Egypt	61	37	28	56	46
Jordan	51	40	46	51	52
Kuwait	16	54	58	55	51
Morocco	50	57	33	54	44
Qatar	18	22	44	17	15
Tunisia	74	65	62	62	68
United Arab Emirates	67	66	73	40	27
High-performing comparators					
South Korea	85	82	80	97	84
Taiwan	85	89	87	86	85
Large comparators					
China	56	69	43	95	70
India	79	97	78	82	76
Normally endowed comparators					
Bangladesh	30	46	36	15	5
Brazil	53	78	70	85	80
Pakistan	52	67	47	53	37
Turkey	69	72	69	76	61
Resource-rich comparators					
Botswana	17	11	32	29	28
Indonesia	54	32	30	70	57
Nigeria	43	44	25	61	30
Venezuela	10	12	22	9	16

Note: Data are percentiles (higher number is better); sample: n = 117.

Source: World Economic Forum, *Global Competitiveness Report 2005–2006.*

worse than the high-performing economies of South Korea and Taiwan as well as the large economies of China, India, Brazil, and Turkey. Their scores are comparable to the remaining resource-scarce comparators, Bangladesh and Pakistan. One could argue that these scores are largely a function of economic size—smaller economies will have less capacity to

generate supplier networks internally—but they just underscore the notion that agglomeration economies and the late start of the Arab countries on industrialization confer a considerable disadvantage on the Middle East with respect to many competitors.

Limited Globalization: A Symptom of Internal Environment

How does one explain the limited globalization (World Bank 2004a, 2004b; UNDP 2002, 2003) of the Arab economies, the definition of which includes, inter alia, low levels of exports and imports relative to GDP and low levels of FDI? This lack of deeper integration with world markets may be symptomatic of deeper problems within these societies reflecting suspicions at both the elite and popular levels about of the benefits of international economic integration, as will be discussed in greater detail in chapter 7. In this regard it is reminiscent of notions similar to those held by intellectual proponents of dependency theory (and its populist reincarnation in some of the less responsible criticism of globalization), who argue that integration inevitably does economic harm to the poorer countries. There is also a recurrent refrain that the absence of greater integration reflects a desire to avoid the cultural impact of broader globalization. Conversely it could also reflect lack of trust or assessments of risk by trade partners from outside the region as will be discussed in greater detail in chapter 8—after all, it takes two to tango. Whatever the "true" underlying source of limited globalization, the policy stance has typically been the encouragement of import substitution plus the accompanying overvaluation of exchange rates. Such policies inimical to trade have also been pursued in other regions but have, to a large extent, been abandoned.

Historically the Middle East—except the GCC countries, which maintain a uniform 5 percent tariff—has been characterized most notably by high tariff rates and significant quantitative restrictions (table 4.8). Tariff levels generally increase with the degree of processing, conveying to manufacturers high levels of effective protection.[7] Regulations applied in a discriminatory manner against foreign exporters or service providers act as nontariff barriers (Zarrouk 2000a).[8] Yet the maintenance of these policies, which act as an effective tax on exports, is not sufficient to explain shortfalls in trade expansion in the 1980–2004 period.[9] Historically implementation of export

7. See Hoekman and Messerlin (2002, table 4) for data on Egypt, Morocco, and Tunisia.

8. See Kheir-El-Din (2000) for an analysis of Egyptian use of product standards as a nontariff barrier.

9. See Angels-Oliva (2000) and Zarrouk (2000c) for comprehensive analyses of formal trade barriers in MENA countries. Cassing et al. (2000) provide a detailed analysis of Egypt. For a study of the adverse effects of Egypt's earlier import-substitution regimes, see Hansen and Marzouk (1965).

Table 4.8 Trade barriers

Country	Mean tariff rate 1990	Mean tariff rate 1995	Mean tariff rate 2000	Nontariff barriers, 2001	Overall protection, 2001	*Global Competitiveness Report* (GCR) score: Hidden trade barriers	GCR score: Prevalence of trade barriers	GCR score: Irregular payments in exports and imports
Middle East								
Algeria	24.6	22.9	24.2	29.1	22.0	29	33	38
Egypt	33.5	28.3	19.7	0.8	15.0	5	10	47
Jordan	n.a.	n.a.	14.4	36.7	28.3	68	42	73
Kuwait	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	70	56
Morocco	23.5	22.8	26.0	13.0	28.3	46	12	17
Saudi Arabia	n.a.	n.a.	n.a.	10.2	11.3	n.a.	n.a.	n.a.
Syria	20.4	14.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	27.5	27.5	29.9	21.1	30.0	48	45	59
High-performing comparators								
South Korea	13.3	11.5	9.4	0.6	8.0	49	64	56
Taiwan	9.7	8.0	9.7	n.a.	n.a.	72	74	83
Large comparators								
China	40.3	37.5	17.5	19.4	16.5	32	29	60
India	79.2	55.2	32.9	43.8	36.0	60	54	38
Normally endowed comparators								
Bangladesh	102.2	81.2	22.1	5.1	23.7	28	41	1
Brazil	30.0	12.0	14.6	14.2	16.9	21	25	50
Pakistan	58.8	61.1	n.a.	n.a.	n.a.	27	31	18
Turkey	22.7	9.0	13.5	13.4	10.1	40	61	31
Resource-rich comparators								
Botswana	11.0	19.7	7.2	n.a.	n.a.	62	69	55
Indonesia	20.3	17.0	11.9	9.1	6.6	38	50	9
Nigeria	34.3	32.8	n.a.	2.9	17.1	13	17	13
Venezuela	30.6	13.4	12.0	23.7	16.8	1	18	16

n.a. = not available

Notes: Nontariff barriers are ad valorem equivalent of nontariff barriers, import-weighted, if nontariff barriers exist. GCR figures are in percentiles (higher number is better); hidden trade barriers, n = 104; other GCR indicators, n = 117.

Sources: Tariff data: Park and Lippoldt (2003); Nontariff barriers: Kee, Nicita, and Olarreaga (2004a); Overall protection: Kee, Nicita, and Olarreaga (2004b); Hidden trade barriers: *Global Competitiveness Report 2004–2005;* Other GCR indicators: *Global Competitiveness Report 2005–2006.*

processing zones, which might serve as a geographically delimited testing ground for reform, has been desultory (Rao 2000), though governments in the region have been more receptive to qualified industrial zones (QIZs) and other measures, as discussed in chapter 8 and appendix 8B.

Beyond explicit border measures, however, a variety of evidence points to a nexus of issues involving logistics and customs management that may significantly deter exporting, particularly integration into cross-border supply networks, which requires the ability to move components across borders in a timely and reliable fashion. For example, Denise Konan (2003) estimates that in Egypt, the largest potential exporter of manufactured goods, border delays are equivalent to a 50 percent tariff. Other problems in Egypt include inadequate physical infrastructure and unreliable air cargo service. Hamstrung by inadequate capacity, airlines bump manufactured exports for tourists and perishable goods—a deterrent to entering markets that require fast supply response or transborder supply chains. Sea freight may be more reliable, but lack of consolidation means many containers leave port empty, driving up costs to exporters. Similar coordination problems afflict trucking. Poor communication and information systems mean that trucks are used inefficiently: Trucks finishing deliveries cannot find return loads, driving up costs. Moreover, a high tariff on trucks means that the fleet is aged, expensive to maintain, and unreliable. The picture is not uniformly dark, however: Over the past decade the port of Casablanca has reportedly reduced its container processing times from 18 to 20 days in 1996 to a few hours.[10]

These "physical" issues are related to the way the transportation sector is organized, specifically the prevalence of entrenched public-sector monopolies. Dan Magder (2005) reports an extraordinary illustration of this from Egypt: The Cairo Airport Authority restricts the number of pieces of equipment that carriers are permitted, forcing exporters to rent equipment from Egypt Air at very high rates—in the case of container dollies, the rental fee per hour is reportedly almost equal to the purchase price of a new dolly.

Practices within the public sector itself reduce efficiency even further. According to a survey of 230 firms in eight Arab countries conducted between July and December 2000, it took on average 2 to 5 days to clear imported airfreight through customs, 2 to 10 days to get a seaborne shipment released, and 1 to 3 days for road transit (Zarrouk 2003). Magder (2005) reports that in Egypt export customs clearance generally takes 1 to 3 days; however, import clearance can exceed 10 days. And while one might discount the importance of a delay in getting a consumer good into the country, holdups of this magnitude make it very difficult to get into cross-border supply chains if one cannot get imported components into

10. Alan Beattie, "Forget Tariff Cuts, the Poor Need Trade Facilitation," *Financial Times*, April 1, 2006.

the country in a consistent and timely manner. Nor do the trade impediments appear to be purely time-related: The survey respondents also reported capricious assessments of product standards.[11]

Jamel Zarrouk's survey found that in the region 10 to 20 signatures are needed on average to process an air or sea freight shipment. The average company in the survey spent 95 days of labor per year resolving problems with customs and other officials. Such extensive contact can, and apparently does, facilitate the solicitation of bribes, though the evidence on "hidden barriers" and irregular payments is mixed: In the *Global Competitiveness Report 2005–2006* the Arab countries do not look particularly bad relative to similarly situated countries with respect to survey perceptions of "hidden barriers" and irregular payments to customs officials (table 4.8). Zarrouk's survey paints a very different picture, however: Customs clearance costs and bribes were identified as adding significant costs, though the responses indicated that some countries, notably Egypt and Jordan, had made progress on this score in recent years, while others such as Lebanon, Saudi Arabia, and Syria had stagnated or regressed.[12]

Moreover, to take the case of Egypt, while there may have been improvements with respect to these issues in recent years (and more in process due to ongoing reforms of trade policy and customs administration), Rania Miniesy and Jeffrey B. Nugent (2004) report econometric evidence that suggests Egypt's competitiveness has declined over time. There is no necessary contradiction here: The improvements may have been too recent to be picked up in their statistical analysis. But this points to a deeper issue as well: While Arab countries may be making improvements in an absolute sense in a variety of areas, their relative competitiveness may be declining if their rivals are improving even more quickly.

Gains from Deeper Integration

The failure to expand international trade has several implications. Countries may forgo gains in productivity from reallocation of resources according to comparative advantage and from improved productivity. Although these benefits have not been definitely proved to everyone's satisfaction, there is a strong presumption that countries as closed as many of the Arab ones would gain in several ways. Greater export orientation, induced by

11. One, admittedly dated, assessment of the costs imposed by these practices concluded that in 1995, "public monopolies in ports and port services combined with poor infrastructure for loading and storing goods, make the costs for discharging a container 2 to 3 times higher in Alexandria than other Mediterranean ports" (Hoekman and Messerlin 2002, 13).

12. It should be noted that the survey was carried out prior to the implementation of the US-Jordan free trade agreement. The provisions on transparency in this agreement may have encouraged even further improvements in Jordan in recent years.

policy changes that would make exporting more profitable, could lead firms to invest more in improving their productivity and the quality of their products. Import liberalization would allow firms lower-cost access to a greater variety of inputs, some of which embody the fruits of research and development in trading partners.[13] And there is some evidence that importing firms exposed to foreign technology engage in more innovative activity than those that are not (MacGarvie 2006). More intensive competition from imports could force locally oriented firms to improve their productivity to stay competitive with now cheaper imported final goods. None of these benefits is guaranteed and the experience of countries with greater integration has not been uniformly beneficial. But in countries as diverse as China, India, Chile, and Thailand, the total effect has accelerated growth after liberalization. While some countries such as South Korea were protectionist during their period of accelerated growth, their exporting firms did not suffer from disabilities imposed by tariff restrictions, but rebates allowed exporters to face international prices for the inputs embodied in exports (Pack and Westphal 1986).

Given that exporting requires considerable investment by firms in establishing networks and meeting quality standards and delivery times, governments cannot simply command its growth (Clerides, Lach, and Tybout 1998). Exporting requires supportive public policies including a competitive real exchange rate and access to tradable inputs at world prices. Absence of either of these policy-determined variables militates against profitable exports by firms even if they incur the costs necessary to improve their competitiveness. Moreover, despite optimism in some analyses about the potential for increasing exports (World Bank 2004a), largely based on the low export-GDP ratio compared with other countries, it may now be much harder to export successfully than it was even two decades ago.[14]

China (and increasingly India) has become a major exporter of a vast array of labor-intensive products, the type most important for the Arab economies if exporting is to partly address their employment problem. A considerable array of industrial skills has been accumulated in the last two decades in these nations, to say nothing of other lower-middle-income Asian countries such as Indonesia, Thailand, and the Philippines. Moreover, industrial regions in each nation now benefit from agglomera-

13. On the importance of international technology spillovers, see Coe, Helpman, and Hoffmaister (1996).

14. Though assuredly the Arab countries are below their "expected" or "potential" level of exports given their per capita income, it is not clear how likely it is that these deviations from expectations can be closed. Increasing exports is not a matter of erasing half the gap in a statistical norm. Rather it requires both good national policies and firm-cost structures that allow them to meet international competition. But these costs may depend not only on individual firms' efforts but also on the context in which each firm is embedded to allow it to take advantage of agglomeration economies. These issues will be addressed in chapter 6.

tion economies due to a large complementary range of industrial products, business services, and a large pool of workers with sufficient skills to be productive employees in a variety of businesses.[15] Anthony Venables and Diego Puga (1999) have argued that given agglomeration economies, existing industrial complexes can satisfy almost all demand for manufactured goods. Even if this view is exaggerated, today entry into the most labor-intensive product areas is daunting. Whatever the optimality of past performance, and it seems very likely that trade in manufactures was too small, exports are necessary to help increase productivity growth, to provide employment, and arguably to ease the complexity of macroeconomic policymaking.

As an alternative, Middle Eastern countries could develop labor-intensive service sectors, circumventing some of the problems that plague the industrial sector. Tourism is one such possibility—building on the region's geography in the form of its long Mediterranean and Red Sea coastlines and the abundance of antiquities reflecting the region's long multicultural history. (According to the World Bank, controlling for economic fundamentals, Egypt is an enormous "overachiever" in tourism—one supposes that it is hard to control for the Pyramids in a regression model [World Bank 2004b, figure 1.17].)

However, MENA has been losing world market share since at least the mid-1980s (World Bank 2004b), and attacks on tourists at Luxor, Sharm el-Sheik, and Cairo in Egypt and the intifada in the Palestinian Authority territories have created at least temporary and localized disruptions. Expanding the region's tourism industry, however, immediately raises issues of cultural acceptance and personal security, which are discussed in greater detail in chapter 9. Dubai, a UAE emirate, has established itself as a regional transportation hub and with sun, sand, and more relaxed mores than its neighbors has carved out a niche in the tourism industry, attracting 5.5 million visitors in 2004 and aiming for 15 million in 2010, which would rival Orlando as an international tourist destination.[16] But Dubai is an anomaly: Emiratis make up only about 10 percent of the labor force, and as a consequence unemployment is not such a pressing concern. In any event, workers imported from outside the region would fill most of the anticipated jobs. Nevertheless, Dubai's success could stimulate variants on the formula, such as Islamic-, eco-, or family-oriented tourism, as is being contemplated elsewhere in the region.

The region has also been losing ground in nontourism services. Another possibility for resurgence, and one requiring less of a physical presence by foreigners, lies in the potential for becoming back-office outsourcing locales,

15. For a recent discussion and extensive references to the literature on agglomeration economies, see Harrigan and Venables (2004).

16. Matthew Garrahan, "Kerzner Plans $1.2bn Dubai Palm Venture," *Financial Times*, October 27, 2005.

particularly for the former French colonies of the Maghreb.[17] The United Arab Emirates is trying to break into this market among the Anglophones, though in the latter's case, most of the employees are expected to be imported from outside the region. Education and health care are emerging industries in the Gulf. Bahrain aims to become a regional alternative provider for health care services currently sought abroad, primarily in Europe and Southeast Asia. Dubai has established a "knowledge village" hosting branches of 13 foreign universities, while Qatar has an "education city" with four.[18] Other similar plans are on the drawing board. These are all positive initiatives, no doubt, but at least in the case of education schemes, one wonders if they are just a proliferation of suboptimal scale institutions that will not survive the next decline in the oil price, at least without some consolidation. And, as in the case of the tourism and back-office industries, employees from outside the region are expected to fill many of the jobs.

In summary, the absence of globalization is both a symptom of the problems of some of the Arab countries and a source of some of their difficulties. Without greater participation in the world economy, the overriding political economy problem of providing additional employment will be difficult to resolve, as will be realizing the foreign exchange necessary to facilitate imports of investment goods and intermediates. In chapters 8 and 9 we consider the potential role of the world community in fostering additional exporting (and importing) through a variety of trade agreements and other measures.

Capital Flows

Foreign Investment

The extractive sector's prominence in some Arab economies complicates cross-national comparisons of FDI inflows. Generally speaking, FDI in the Middle Eastern economies has typically been quite low outside the natural resource–based sectors, particularly oil and gas (table 4.9).[19] The Arab countries are uniformly "underperformers" when it comes to attracting FDI, a point emphasized in the *Arab Human Development Report 2002* and

17. Even this has proved controversial with some French politicians floating proposals to force call center staff to tell callers their locations or their legal (Arabic) names.

18. "A Survey of Higher Education," *The Economist*, September 10, 2005.

19. Although Western firms initially developed the region's oil wealth, most of the oil industry was subsequently nationalized and foreign participation restricted. Kuwait is contemplating relaxing historic restrictions on inward FDI in the oil sector, however, as state firms have encountered difficulty meeting booming demand without access to the most advanced technology (Carola Hoyos, "Kuwait Says It Needs Foreign Oil Companies," *Financial Times*, December 13, 2005).

Table 4.9 Inward foreign direct investment

Country	Cumulative for period (billions of US dollars) 1970–79	1980–89	1990–99	2000–2004	Share of GDP (percent)[a] 1970–79	1980–89	1990–99	2000–2004
Middle East								
Algeria	1.0	0.3	1.6	4.2	0.5	0.1	0.3	1.5
Egypt	1.7	8.6	7.5	2.6	1.0	2.7	1.3	0.7
Jordan	0.1	0.5	0.9	1.3	0.6	0.9	1.2	3.6
Kuwait[b]	0.0	0.0	0.5	–0.2	0.0	0.0	0.2	–0.1
Morocco	0.1	0.7	5.6	6.0	0.2	0.4	1.7	4.0
Saudi Arabia[c]	–2.9	23.5	7.2	–5.0	–1.1	1.6	0.5	–0.5
Syria	0.0	0.3	1.1	0.6	0.0	0.3	0.9	0.8
Tunisia	0.5	1.6	3.6	2.5	1.4	1.8	2.1	3.0
High-performing comparators								
South Korea[d]	0.3	3.8	25.8	26.6	0.2	0.3	0.6	0.9
Taiwan	n.a.	4.6	14.6	12.8	n.a.	0.5	0.6	0.9
Large comparators								
China	0.0	15.1	283.1	240.4	0.0	0.5	3.9	3.2
India	0.4	1.0	15.1	24.6	0.0	0.0	0.4	0.9
Normally endowed comparators								
Bangladesh	0.0	0.0	0.6	1.1	0.0	0.0	0.1	0.4
Brazil	13.4	17.4	104.7	100.1	1.1	0.7	1.6	3.7
Pakistan	0.2	1.1	5.0	3.2	0.1	0.3	0.9	0.8
Turkey	0.5	1.7	7.7	9.8	0.2	0.2	0.5	1.0
Resource-rich comparators								
Botswana	0.2	0.6	0.2	0.9	1.7	4.6	0.3	3.0
Indonesia	2.0	3.3	21.6	–7.0	0.8	0.4	1.1	–0.9
Nigeria	3.1	4.3	11.8	8.1	1.6	1.7	4.1	3.0
Venezuela	–1.0	1.0	21.4	13.3	–0.4	0.2	2.8	2.5

a. Simple average of available data; b. Data not available for 1970–74; c. Data not available for 1970; d. Data not available for 1970–75.

Sources: World Bank, *World Development Indicators*, May 2006; Taiwan: Central Bank of China, Republic of China (Taiwan), and *Taiwan Statistical Databook*, 2005; Saudi Arabia: World Bank, *World Development Indicators*, April 2006.

Eid and Paua (2003).[20] In all but a few countries, the absolute size of inflows has been very small, and it has accounted for less than 1 percent of GDP and a very small percentage of fixed capital formation. In the last several years FDI has noticeably increased in a number of countries such as Egypt, which experienced 50 percent increases in 2003 and 2004 fueled in part by the surge in oil prices and one-off privatizations.

Much of the investment has been concentrated in real estate and/or tourism (i.e., there has been a boom in hotel and resort construction). Only time will tell whether these projects are sustainable and generate tourism revenues (hence might be considered at least partly in the "tradable" sector and contribute to the balance of payments), though the multiplicity and grandiosity of these projects certainly give one pause. Likewise, whether these increases can be sustained and extended to greenfield investments outside tourism or the extractive sector is an open question and would appear to depend, at least in significant part, on whether the oil boom is sustained—that is, in aggregate terms will the future look more like the previous three years or the previous 25? Increased FDI could potentially also contribute to technological and marketing skills in the recipient countries as will be discussed in chapter 9.

Another potential source of investment financing is the repatriation of capital owned by Arab nationals (further discussed below). A. T. Sadik and Ali A. Bolbol (2003) provide a lower-bound estimate of capital outflow from the Arab countries for the 1975–2000 period of $212 billion and an upper-bound figure of $318 billion, which if repatriated could provide a large source of investment financing. Such a development would be desirable for supplementing national saving, suggesting the potential payoffs to the region of both better economic performance and a more stable environment including a reduction in both terrorism and extremist rhetoric.

A notable development in the banking sector has been the growth of Islamic banks, one institutional manifestation of Islamic finance more broadly, which seeks to accumulate or channel capital through distinctively Islamic institutions. (Islamic finance should not be confused with terrorist finance [box 4.2]). The Koran contains an injunction against *riba,* interpreted by some as usury, though under a more strict reading it could be regarded as a complete prohibition on the charging of interest.[21] Other Ko-

20. It is worth noting that the figures for most Arab countries are higher than those for South Korea and Taiwan, which did quite well despite their relatively inhospitable stance toward FDI, but far below that for China, which succeeded while adopting a more open approach. From a macroeconomic standpoint, South Korea and Taiwan did well partly because they maintained very high domestic saving rates. The technology transfer aspect of FDI is discussed in chapter 6.

21. See Siddiqi (1981), Khan and Mirakhor (1987), Kuran (1992), Henry and Wilson (2004), Iqbal and Molyneux (2005), and El-Gamal (2006) for surveys of Islamic economic institutions and thought. Rodinson (1973), Kuran (1993, 2003b), and Pryor (2006) argue that in reality, uniquely Islamic economic practices and institutions have minimal impact on resource allocation.

ranic teachings may restrict or deny the use of other financial instruments such as options, futures, and insurance contracts (Al-Suwailen 2006). In place of interest on deposits, Islamic financial institutions use a variety of *sharia*-compliant instruments to generate returns to savers. The Islamic Development Bank in Jeddah, Saudi Arabia, has supported the development of Islamic finance, and in recent years a number of transnational official or semiofficial institutions have been set up to provide regulatory and religious guidance, including the Islamic Financial Services Board established in 2002 by the central banks of a number of Islamic countries (El-Hawary, Grais, and Iqbal 2004). Such institutions are needed because rulings on sharia compliance are not uniform across different schools of thought, different regulatory frameworks are applied in different locales, and compliance has become an issue with some investment funds.[22] Ironically, much of the financial innovation in creating sharia-compliant instruments has been undertaken by the Islamic finance arms of Western institutions such as ABM Amro, Citibank, Deutsche Bank, HSBC, and Merrill Lynch. Often these products are "white-labeled" through local, Islamic institutions.

Contemporary Islamic banking started in Egypt in the 1960s under the leadership of Ahmed al-Najjar, who had worked in a West German credit association, receiving the official imprimatur of the Egyptian government in 1971. Al-Najjar sought to extend access to formal financial institutions to less advantaged Egyptians, many of whom had never before had bank accounts, by establishing a network of retail Islamic banks and adopting marketing innovations such as operating them on Islamic hours and having bank employees dress in Islamic clothes to reassure customers. His less idealistic successors have largely targeted high net worth individuals in the Gulf. The first Islamic commercial bank, the Dubai Islamic Bank, was established in 1975. After 1979 a number of governments including Iran, Pakistan, and the Sudan attempted to "Islamicize" their national financial systems. Islamic banks now number in the hundreds. The first independent sharia-compliant investment bank announced plans to go public in 2006.

One recent estimate of deposits at Islamic banks puts the figure at $300 billion, though Munawar Iqbal and Philip Molyneux (2005) caution that if they do not improve their performance relative to conventional banks, their deposits will inevitably erode. In May 2005 the International Monetary Fund (IMF) estimated that Islamic financial institutions as a whole controlled perhaps $400 billion, a figure that had been rising at a rate of 10 to 15 percent.[23] There is some anecdotal evidence that this trend, especially in the mutual funds sector, has accelerated in recent years. Moody's

22. Charles Batchelor, "Investment Funds 'Not Complying with Sharia Law'," *Financial Times*, May 12, 2004.

23. "Arab Banks, Investors Frown on World Bank Bonds," Reuters, September 20, 2005; El-Hawary, Grais, and Iqbal (2004); Henry and Wilson (2004).

estimates that 250 Islamic mutual funds manage $300 billion in assets.[24] The proequity bias of Islamic finance could make it a vehicle for venture-type financing and relieve the capital constraints on small and medium-sized enterprises. In the insurance area, institutions organized as *takaful*, a kind of mutual insurance scheme, are making inroads (El-Gamal 2006).

From the standpoint of cross-border investment, the role of Islamic financial institutions is ambiguous. The Koranic prohibition on riba, and the consequent unease about portfolio investment in bank loans and bonds, has encouraged a strong equity orientation in the investment portfolios of Islamic financial institutions. However, local stock markets have limited absorptive capacity, while those in the United States are large, deep, and transparent. So while one might expect Islamic institutions, given their religious orientation, to exhibit home- or at least Islamic-bias, Rodney Wilson (2004) concludes that their propensity to channel capital into the markets of non-Islamic countries is as big as, if not bigger than, that of conventional financial institutions.

The increasing popularity of *sukuks*, or sharia-compliant Islamic bonds, is also likely to influence regional debt markets. Sukuks, introduced in 2001, pay dividends from cash flows from tangible assets rather than interest. Issuers have included the governments of Saudi Arabia, the United Arab Emirates, Qatar, the Sudan, Pakistan, and Malaysia, as well as the Islamic Development Bank, the World Bank, the German state of Saxony-Anhalt, and private firms in the Gulf region. In 2005 the volume of corporate sukuks more than doubled to $11.4 billion (El-Gamal 2006). In January 2006 Dubai Ports World raised $3.5 billion in the largest sukuk issuance to date. Relative to conventional bond issuance the size of the Islamic bond market is minuscule but is growing exponentially. Ratings agencies have begun to rate sukuks as they would any other bond, and in 2006 Citigroup introduced a sukuk index.

While this is an interesting institutional development, it is not clear how if at all the increasing use of this instrument will affect either aggregate capital accumulation or its sectoral allocation and hence growth performance. However, as these examples demonstrate, issuers of sukuks are not limited to the Middle East, or even Islamic entities, so in principle the impact of the development of this asset class on cross-regional financial flows is indeterminate. Nevertheless, it is not implausible to expect that as this asset class develops, the net effect will be to increase the degree of home-bias in Middle Eastern portfolio investments.

Ultimately whether this scenario is realized comes down to how large and sustained the post-9/11 increase in home-bias is. One could argue that in light of the quality and depth of Western financial markets in comparison to the casino-like atmosphere of the region's bourses, this effect is

24. Gillian Tett, "Banks Create Muslim 'Windows' as Islamic Banking Expands Its Niche," *Financial Times*, June 2, 2006.

likely to be small and/or transitory, and there is some evidence of inertia in portfolio allocation behavior: European and Asian private investors throughout the 1990s and early 2000s continued to purchase American real and financial assets despite a significant equity correction and what some feel are overvalued American asset markets. Looking forward, Middle Eastern markets may be subject to relatively high political risk associated with political instability—even if it were not an issue in the past. Investors seeking high returns for a given degree of safety and under current relatively turbulent conditions may not make large portfolio adjustments.

Conversely, post-9/11 developments may have led to an increase in outsiders' subjective assessment of the riskiness of investment in the Middle East as will be discussed in succeeding chapters. It may well be the case that the greater knowledge and cultural sensitivity of investors from within the region may yield more nuanced risk assessments. If this is the case, such differences in risk assessments across investors may actually increase the incentives for intraregional investment, since in essence the investors from outside the region have been scared off.

Beyond the region, Arab investors have indeed become more prominent, particularly in real estate and regulated services such as telecommunications.[25] Many are public or quasi-public entities—the Abu Dhabi Investment Authority is estimated to manage $300 billion.[26] (See box 4.1 on the Dubai Ports World controversy.) Yet it is unclear from where their competitive advantage derives, beyond liquidity-driven portfolio diversification, and keeping with the relative paucity of investment in traded-goods sectors, Bolbol and Ayten M. Fatheldin (2005) found little complementarity between intraregional FDI and exports.

Nevertheless, heightened political tensions, perhaps arising from future terrorist attacks in the West, could intensify home-bias, as might strengthening local financial sectors (see box 4.2 on terrorist finance). The latter, at least, are amenable to policy intervention. Dubai has established a financial center with its own commercial laws, regulators, and courts. The Dubai International Financial Exchange opened in September 2005 is intended to be a more transparent, better-regulated market aimed at international

25. Recent examples include the takeover by Saudi Oger of the Turkish telecom provider Turk Telekomunikasyon (July 2005, $6.6 billion); a minority stake investment by the United Arab Emirates' International Petroleum Investment in Taiwan's Chinese Petroleum (October 2005, $5 billion); Kuwait's Mobile Telecommunications' takeover of Dutch-registered sub-Saharan African cellular phone service provider CelTel (March 2005, $2.8 billion); Emirates Telecommunications' purchase of a 26 percent share of Pakistan Telecommunications (June 2005, $2.6 billion); and the June 2006 stated intention of Dubai's Emaar and Dubai World to invest more than $30 billion in a variety of projects in Pakistan (Farhan Bokhari, "Dubai in Huge Pakistan Investment," *Financial Times*, June 3, 2006).

26. As a point of comparison, the United States' largest pension fund, the California Public Employees Retirement System (CALPERS), runs $200 billion (Leslie P. Norton, "The Gulf's Other Gusher," *Barron's*, April 24, 2006).

Box 4.1 The Dubai Ports World (non)deal

In October 2005 Dubai Ports World (DPW) bid to acquire the Peninsular and Oriental Steam Navigation Company (P&O), a UK-registered private entity operating ports in 18 countries, including the United States. DPW is owned by the government of Dubai.

The takeover was subject to regulatory approval in the United Kingdom as it would give DPW control over a British firm. In the United States, although the proposed deal amounted to one foreign firm taking over another, it would involve the transfer of P&O's US subsidiary that operated the ports of six US cities and was subject to approval by the interagency Committee on Foreign Investment in the United States (CFIUS).

By January 2006 the deal was cleared by the authorities in both countries, which considered the potential impact on security, and in the case of the United States, extracted a side letter committing DPW to additional security-related requirements.

However, in February controversy exploded, apparently sparked by a small US firm seeking to increase its leverage over P&O in an unrelated dispute. CFIUS, apparently for the first time since its creation in 1975, backtracked and requested that the case be reopened.

Congressional demagogues were not to be assuaged however, introducing legislation to block the deal. In March the congressional leadership informed the White House that there were insufficient votes to sustain a presidential veto. DPW announced that it would divest the US assets, but the House nevertheless voted overwhelmingly against the deal, with one headline reading "House Puts a Bullet in Port Deal's Corpse." The fiasco, along with an imbroglio over the takeover of Unocal by the China National Offshore Oil Corporation, spurred proposals to reform the regulatory process (Graham and Marchick 2006).

Yet as long as the United States runs current account deficits, it will require counterpart capital inflows from abroad, and one way of attenuating investment disputes would be to reduce US reliance on foreign finance. These deficits are mirrored by oil-fueled surpluses in the Gulf, and quite naturally Arabs will be prominent among investors in US assets. Indeed, the affair is reminiscent of past episodes involving Japanese investors in the 1980s. As before, the DPW controversy appears to have been driven as much by xenophobia as finance.

The affair damaged the United States' already tattered reputation in the Middle East, where, against a backdrop of American calls for greater openness, US behavior was interpreted as hypocritical, if not racist. This outcome was doubly unfortunate because the United States had been painstakingly painting the United Arab Emirates as an ally—indeed the leading foreign host of US Navy ships.

Box 4.2 Terrorist finance

Terrorist finance, which should not be confused with Islamic finance, generally involves relatively small and irregular transactions of funds often derived from legitimate activities but put to severely destructive ends. al Qaeda, for example, has used a variety of channels to transfer funds for its operations, including smuggling cash, gold, and diamonds; *hawala*, a traditional money transfer system; the inadequately regulated Islamic financial system; and wire transfers and other instruments used by modern Western financial systems.

In the Middle East, the main, though not exclusive, focus has been on Saudi Arabia, believed to be the primary source of al Qaeda financing and front businesses. Historically al Qaeda exploited the regulatory inadequacies of the Islamic financial system and the reluctance of financial-sector regulatory authorities in the Gulf to implement effective anti–money laundering systems. Bahrain, Lebanon, the United Arab Emirates, and Egypt all strengthened their anti–money laundering laws during 2000–2001. Saudi Arabia followed suit after the advent of al Qaeda terrorism within the kingdom in May 2003, though the adequacy of the Saudi response has been questioned (Council on Foreign Relations 2002, 2004).

Much of the focus has been on hawala and the activities of lightly regulated charities (El Qorchi, Maimbo, and Wilson 2003). The role of charities is particularly problematic because it sets up a potential conflict between the Islamic obligation of *zakat* (or charitable giving) and law enforcement.

The spotlight on hawala is ironic insofar as of the 45 cases of terrorist financing between 1998 and 2004, 18 involved wire transfer and only 4 involved alternative remittance systems (Reuter and Truman 2004, table 3.1). Hawala thrives in environments where the formal financial system is inadequate or prohibitively costly. While regulation may play a role, technical assistance to develop the formal financial system may be a useful accompaniment to law enforcement.

There have been debates about how best to tackle terrorist finance. In the United States, the regulatory regime introduced as part of the USA Patriot Act has been criticized as being burdensome and inefficient. European countries complain, in turn, that requests by the US Treasury's Office of Foreign Asset Control to freeze the assets of particular individuals or entities are not accompanied by sufficient evidence to defend these actions in local courts. Existing anti–money laundering laws may be useful in disrupting terrorist finance. But the differences between say al Qaeda transferring $100,000 or less and the Medellin Cartel trying to launder millions of dollars on an ongoing basis can make this effort "like looking for a needle in the haystack" (Reuter and Truman 2004).

investors. Among the assets envisioned for trading on the exchange are the stocks of the Dow Jones Arabia Titans index of 50 leading Arab stocks as well as Islamic bonds packaged for Western investors. It is off to a slow start, however, with a limited number of traded listings. Long a center for gold trade, Dubai launched gold futures trading in 2005 and trading in currency futures in 2006. An oil futures contract based on Omani crude is envisioned, and the government of Oman has taken a 30 percent stake in the commodities exchange. Arguably none of these instruments are sharia-compliant.

Saudi Arabia is attempting to strengthen regulatory quality to improve the attractiveness of its financial markets, including permitting a greater role for foreign institutions. It has announced plans to build a $6 billion financial district in Riyadh. Kuwait is also exploring the possibility of developing itself as a center of financial intermediation and, like Saudi Arabia, is permitting greater participation by foreigners. Qatar has established a similar financial free zone, and Bahrain is attempting to position itself as the center for Islamic finance. Yet as in the case of the forays into the market for higher education, the economics of agglomeration suggest that not all of these initiatives are likely to bear fruit, and indeed, one response to the decline in stock prices beginning in late 2005 may be retrenchment and possibly a reversal of these liberalizing trends.

However, if some of these projects prove successful and financial-sector modernization is extended more broadly, it would not be difficult to imagine more of the region's investable capital staying home. Increased preference for sharia-compliant or Islamic finance could also lead to an effective increase in home-bias.

Oil Rents, Aid, and Remittances

If the demonstration effect of contemporary globalizers was a "pull" that the Middle East resisted, the region also escaped the "push" of crisis, which has forced policymakers in some regions, most notably Eastern Europe, to undertake radical reforms. Instead, most of the Middle Eastern nations have been the beneficiaries of three features of the post–World War II geopolitical landscape: rapidly rising demand for energy given the unprecedented boom in the countries of the Organization for Economic Cooperation and Development (OECD), the Cold War, and the declining fertility rate in advanced countries, particularly those in Western Europe.

The rapid economic growth in the postwar period and the heavy reliance on fossil fuel helped to maintain steady growth of demand for oil. The oil price increase in 1973 and then in 1979 provided the major oil exporters with a huge increase in foreign exchange earnings, partly used to finance high levels of fixed investment. The rents were enormous for most countries as the price far exceeded the marginal cost of even the high-cost

producers. In a sense the members of the Organization of Petroleum Exporting Countries (OPEC) were the de facto beneficiaries of a foreign aid program whose size was unprecedented, insofar as the countries received additional income from the rest of the world with little commitment of additional national inputs. Given the declines in real per capita income beginning in the early 1980s in Kuwait, Oman, and Saudi Arabia, this experiment in foreign aid was hardly a resounding success. The recipient nations, like most of the other OPEC members, were not able to transform their additional resources into investments that increase long-term growth. As noted in chapter 2, their experience tracked that of Nigeria rather than that of Indonesia, not a very encouraging parallel as Nigeria is widely acknowledged to have had a singularly inept policy environment (Bevan, Collier, and Gunning 1999). Whether the spike in oil prices beginning in 2003 is likely to be sustained is unknowable. While there are indications that lessons have been learned from the earlier experience, another view is that the greater revenues have reduced any sense of urgency about the need for reforms, a pattern exhibited in the past (Richards 2001).

In addition to the direct recipients of revenue, there were indirect beneficiaries, particularly nonnationals from other Arab countries who were employed in these countries and whose remittances constituted an important source of foreign exchange and investment finance in their countries of origin, which may have generated a "Dutch disease" pattern, as a disproportionate share of remittances was invested in the nontradable sector, particularly housing (Page 1998). Egypt and Jordan were particularly large beneficiaries of these remittances, as shown in table 4.10. However, in the 1980s and 1990s, with the decline in the real price of oil and the prospective dwindling of reserves, this cushion both for the oil producers and indirect beneficiaries was limited.

Finally, during the Cold War the Middle East benefited from considerable aid inflows (table 4.10). In relative terms, the amounts reported for Jordan, Egypt, and Syria are equivalent to or surpass the magnitude of peak aid levels provided to South Korea and Taiwan during the 1950s, which declined rapidly during the 1960s as their economies expanded. Egypt and Syria particularly benefited from Soviet aid until the Camp David agreement with Israel in 1979, and then Egypt received large amounts of US aid in the ensuing period. After the Gulf War period, there were significant economic benefits in the form of debt write-offs for Egypt (not reflected in table 4.10) and Saudi aid to a number of Arab participants in the coalition, particularly Syria after its participation in the Gulf War in 1991.[27] In this regard the most apt (though in the opposite direction) comparators may be the Eastern European nations that abruptly encountered hard budget

27. There is also evidence that Egypt received lenient treatment from the IMF in the 1991 negotiations as a result of its participation in the Gulf War (Momani 2004).

Table 4.10 Aid, workers' remittances, and fuel exports (percent of GDP)

	Aid				Remittances				Fuel exports			
Country	**1975–79**	**1980–89**	**1990–99**	**2000–2004**	**1975–79**	**1980–89**	**1990–99**	**2000–2004**	**1975–79**	**1980–89**	**1990–99**	**2000–2004**
Middle East												
Algeria	0.7	0.3	0.5	0.4	1.5[p]	0.8	n.a.	n.a	26.8	21.6	23.0[b]	35.7
Egypt	14.9	5.0	5.8	1.4	10.2[p]	10.1	7.7	3.4	2.9	6.3	2.6[e]	2.6
Jordan	27.0	14.4	9.6	6.8	19.8	19.5	17.7	19.5	0.1	0.0	0.0	0.1
Kuwait	0.0	0.0	0.0[t]	0.0	0.0	0.0	0.0	0.0	64.9	26.9[f]	34.8	46.6[c]
Morocco	3.3	3.7	2.5	1.4	5.7	6.7	6.4	8.2	0.2	0.5	0.4	0.6
Saudi Arabia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.7	42.4[k]	30.4[l]	34.7[m]
Syria	10.7	5.5	2.8	0.7	0.0[p]	0.0	0.0	1.3	9.2	8.5[n]	16.3[o]	19.1
Tunisia	4.4	2.6	1.5	1.3	3.5[q]	4.2	3.7	4.8	8.6	8.8	3.1	3.2
High-performing comparators												
South Korea	0.6	0.1	0.0	0.0	0.0[q]	0.2	0.1	0.0	0.3	0.5	0.7	1.5
Taiwan[a]	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.	0.2	n.a.	n.a.	n.a.	n.a.
Large comparators												
China	n.a.	0.4	0.5	0.1	n.a.	0.1[r]	0.1	0.1	n.a.	1.7[d]	0.9	0.7
India	1.1	0.8	0.6	0.2	0.7	1.1	1.7	3.1[i]	0.0	0.3	0.1	0.6
Normally endowed comparators												
Bangladesh	6.7	6.5	4.2	2.4	0.7[q]	2.7	3.2	5.4	n.a.	0.1	0.1	0.0
Brazil	0.1	0.1	0.0	0.1	0.0	0.0	0.3	0.3	0.1	0.4	0.1	0.5
Pakistan	4.9	3.1	2.0	1.9	6.0[q]	7.5	2.9	3.5	0.3	0.3	0.1[j]	0.3
Turkey	0.3	0.6	0.3	0.1	1.9	2.7	2.1	1.2	0.0	0.3	0.2	0.3
Resource-rich comparators												
Botswana	12.3	8.1	2.4	0.5	0.0	0.0	0.0	0.0[i]	n.a.	n.a.	n.a.	0.0[c]
Indonesia	1.5	1.2	1.1	0.7	n.a.	0.1[s]	0.4	0.7	16.0	14.9	7.6	7.6
Nigeria	0.1	0.3	0.8	0.6	0.0[p]	0.0	2.6	2.7	28.7	32.2[g]	38.2[h]	38.0[i]
Venezuela	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	22.8	20.8	21.1	22.6

n.a. = not available

Note: Table shows simple average of available data.

a. Aid to Taiwan assumed zero; b. 1990–98; c. 2000–2001; d. 1984–89; e. 1990–95, 1997–99; f. 1980–2005, 1987–99; g. 1981, 1983–87; h. 1991, 1996–99; i. 2000–2003; j. 1990–93, 1995–99; k. 1980–82, 1985, 1988–89; l. 1990–96, 1998–99; m. 2000–2002; n. 1980–87, 1989; o. 1990, 1992, 1995–99; p. 1977–79; q. 1976–79; r. 1982–89; s. 1981–89; t. 1990–91, 1995–99.

Sources: World Bank, *World Development Indicators*, May 2006; Central Bank of China; *Taiwan Statistical Databook,* 2005.

constraints as the Eastern Bloc collapsed and were forced to reform. We shall return to this theme in chapter 7.

Financial-Market Development

If domestic and foreign saving are to materialize, a major issue is the state of financial-market development and the ability to mobilize and efficiently allocate domestic and foreign savings, a process that was underappreciated until the financial crises of the 1990s forced economists to reconsider the "real side" implications of financial distress.[28] This renewed interest has generated a second wave of theoretical and empirical research that has documented the relationship between financial-sector development and economic growth as well as the channels through which it works and possible influence of alternative forms of financial-sector organization.[29] This research has identified multiple functions that the financial sector plays in facilitating growth including identifying projects, monitoring management, pooling risk, and secondary-market transactions that relieve the dependence of project finance on the liquidity constraints of individual investors. Moreover, financial-sector development may contribute to growth if liquidity-constrained small and medium-sized enterprises are disproportionately innovative (Rajan and Zingales 1998) or if relaxation of financial constraints increases technological absorptive capacity (Aghion, Howitt, and Mayer-Foulkes 2005). Conversely, given the financial system's role as a "lubricant," financial crises can cascade through the real side of the economy by impeding interfirm transactions.

In the context of the Middle East, the efficacy of the financial sector in fostering capital accumulation depends on the ability of the financial system to not only mobilize local saving but also attract external inflows. Reductions in the rate of growth of consumption could be avoided if foreign saving could provide more of the financing through portfolio investment and FDI or if Arab nationals repatriated large foreign asset holdings. However, analysis of long-term impacts is clouded by the current worldwide liquidity glut generated in significant part by easy US monetary policy since the Asian financial crisis, the Long-Term Capital Management failure, and the 9/11 terrorist attacks, as well as the close to zero nominal interest rate policy of the Japanese central bank. In the Middle East, global conditions are compounded by the run-up in oil prices starting in 2003, explicit calls for the repatriation of capital invested in the West, and a heightened reluctance among some Arab investors to invest outside the region in the wake of the 9/11 attacks and associated increase in interna-

28. For the older tradition, see Gurley and Shaw (1960), MacKinnon (1973), and Shaw (1973).

29. See, for example, King and Levine (1993), Levine (1997), and Levine and Zervos (1998). Aghion (2006) provides a useful survey of this literature.

tional tensions (Warde 2004).[30] After experiencing explosive growth for several years, asset prices in the Middle East began falling in late 2005. This reversal simply underscores the difficulty of disentangling permanent change from transitory factors.

In an overview of the region's financial markets, IMF economists attempted to devise a broad set of quantitative and qualitative indicators of financial-sector development (Creane et al. 2003). They concluded that in comparative terms, MENA financial-sector development unsurprisingly trails the OECD but is above most other developing-country regions. The trends in financial-market development are consistent with those observed with respect to other aspects of economic life: Although MENA was more advanced than Asia in the 1960s, it fell behind in the 1970s and 1980s. Financial-sector development is now accelerating, with Egypt, Jordan, Morocco, and Tunisia exhibiting the greatest improvements, though these countries still lag the Gulf Cooperation Council (GCC) countries—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—in terms of current level of sophistication. The latter may provide templates that countries of interest could replicate. However, for some countries replication would require a relaxation of controls to improve the quality and availability of information that financial markets need to function efficiently. Among the nonoil exporters, financial-sector development is greatest in Lebanon and Jordan, followed by Egypt and Morocco, with Syria bringing up the rear—an ordering, perhaps not coincidentally, corresponding to their relative degree of media openness.

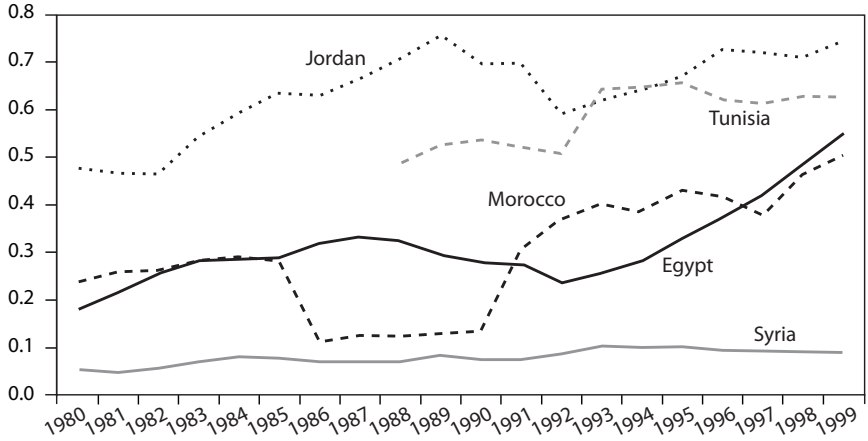
The IMF overall assessment is consistent with time-series data on the development of direct and indirect (bank) finance within MENA indicating that with the exception of Algeria and Syria, financial depth, measured as the ratio of private credit to GDP, has increased over the past decade in all of the Arab countries for which data are available, with increases of 50 percent in some of the normally endowed countries (figures 4.5a and 4.5b). The results in table 4.11 derived from the *Global Competitiveness Report 2005–2006* also place Jordan, Morocco, and Tunisia in the middle of its ranking. This report presents country scores based on surveys of approximately 8,000 business executives in more than 100 countries and could be interpreted as providing an indication of reputation, if not reality.[31]

The IMF economists gave the region generally good marks for basic issues of monetary policy—rates of return are freely determined, govern-

30. One analysis indicates that assets were in fact repatriated; in 2002 net foreign assets for GCC countries fell $18 billion despite a current account surplus of $24 billion (IIF 2005).

31. The survey asks respondents to judge local conditions relative to a global best practices benchmark on a scale of 1 to 7. The World Economic Forum and its network of local affiliates attempt to get a cross-section of respondents from firms of differing sizes across a range of economic activities. The potential weakness of this approach is that the respondents may not know enough about the best practices standard to meaningfully compare with local circumstances. Methodological details of the survey are reported in Blanke and Loades (2005).

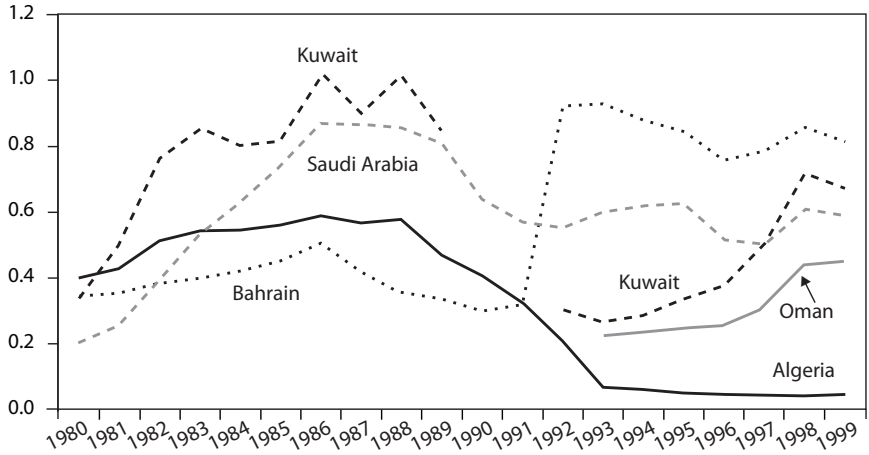
Figure 4.5a Financial depth, normally endowed countries, 1980–99



Note: Ratio of private credit by banks and other financial institutions to GDP.

Source: Albuquerque, Loayza, and Servén (2005).

Figure 4.5b Financial depth, resource-rich countries, 1980–99



Note: Ratio of private credit by banks and other financial institutions to GDP.

Source: Albuquerque, Loayza, and Servén (2005).

ment securities exist, and monetary authorities can use indirect tools to control the money supply, though unsurprisingly there is some intraregional variation in achievement. The banking sector is reasonably well developed in the GCC countries, but elsewhere it tends to be dominated by public-sector banks, highly concentrated, and subject to considerable

Table 4.11 Financial-market development indicators (percentile)

Country	Financial-market sophistication	Ease of access to loans	Access to credit	Venture capital availability	Local equity market access	Number of listed companies as a percent of market capitalization, 2004
Middle East						
Algeria	3	16	13	18	10	n.a.
Bahrain	84	68	77	62	74	63
Egypt	34	39	20	39	48	26
Jordan	60	47	73	50	71	43
Kuwait	75	79	84	79	80	n.a.
Morocco	32	22	15	26	40	73
Qatar	50	78	65	61	59	n.a.
Tunisia	39	49	32	66	50	30
United Arab Emirates	61	84	87	79	66	83[a]
High-performing comparators						
South Korea	70	62	60	74	60	58
Taiwan	74	88	98	91	91	n.a.
Large comparators						
China	26	25	11	42	28	71
India	74	79	100	76	99	36
Normally endowed comparators						
Bangladesh	25	29	56	21	68	11
Brazil	78	40	42	23	50	81
Pakistan	40	74	94	63	75	25
Turkey	57	30	89	28	79	66
Resource-rich comparators						
Botswana	43	62	48	75	61	48
Indonesia	41	45	41	52	57	56
Nigeria	46	15	2	47	56	32
Venezuela	49	33	22	15	21	44

n.a. = not available

a. 2003 data.

Notes: Higher percentiles correspond to greater development. Sample size = 117 developed and emerging-market economies; 108 for "number of listed companies."

Sources: First five columns: *Global Competitiveness Report 2005–2006*; Number of listed companies as percent of market capitalization: World Bank, *World Development Indicators,* 2006.

barriers to entry, conclusions with which economists affiliated with the Islamic Development Bank generally concur (Hussein and Omran 2005).[32]

Historically, state-owned banks have controlled a large share of total assets, and even where banks were nominally privately owned, regulation tended to be heavy and direct. These conditions affected both the lending culture and the composition of lending. Specifically, the lending function was heavily bureaucratized, "manifested in a lack of qualified credit officers capable of assessing risk" (World Bank 2006a, 57). Tax provisions in countries such as Egypt encourage holding government debt over other instruments. One unintended consequence has been to limit capital available for relatively efficient small and medium-sized enterprises. Some support for this notion can be inferred from the relatively weak scores of Jordan and Morocco on the "ease of access to loans" and "access to credit" rankings in table 4.11. Instead, lending to the public sector constitutes an unusually large share of bank portfolios (World Bank 2006a).

The state banks have been used to channel capital to preferred borrowers or projects and as a consequence have been shielded from foreign competition and rigorous regulatory oversight, though Saudi Arabia, Kuwait, and Iraq have all recently eased restrictions on foreign banks. If the local banks effectively assess risk and allocate credit, their development is encouraging—they can serve as intermediaries for lending by foreign banks, subject to successfully managing currency and term matches. Lending by OECD banks to local banks was an important form of capital inflow in South Korea, for example, so at least in some circumstances this inflow can usefully supplement domestic saving. However, if what is actually occurring is simply on-lending to state-supported projects where the risk is socialized, then taxpayers will eventually bear the bill.

Creane et al. (2003) estimate that the share of nonperforming loans (NPLs) varies between 10 and 20 percent across the region, though it varies with macroeconomic conditions: Relatively robust growth in some countries in recent years has probably allowed some existing NPLs to resume some repayments, while lax lending standards under current boom conditions in the oil exporters have probably meant the extension of loans that will never be repaid, storing up problems for the future.[33] The Institute of International Finance (IIF 2005) estimates that GCC bank credit to the private sector increased $42 billion in 2004, more than double the increase in

32. A recent potential source of knowledge transfer has been the recruitment to return home by countries such as Egypt of nationals who have gained experience in more sophisticated GCC banks.

33. More recent estimates for the GCC countries put NPLs at around 5 percent in Saudi Arabia, Kuwait, and Qatar and around 13 percent in Oman and the United Arab Emirates (IIF 2005). The World Bank (2006a) reports even lower estimates of NPLs for the Gulf oil exporters. However, NPLs for the region's nonoil exporters appear to have risen—whether this is intrinsic reflecting deteriorating economic conditions or a statistical artifact of improved regulatory oversight is unclear.

the previous year and five times the average rate in 1991–2001. There is some concern that with the decline in stock market values in 2006, NPLs will increase—bank loans for stock purchases are often collateralized with securities.

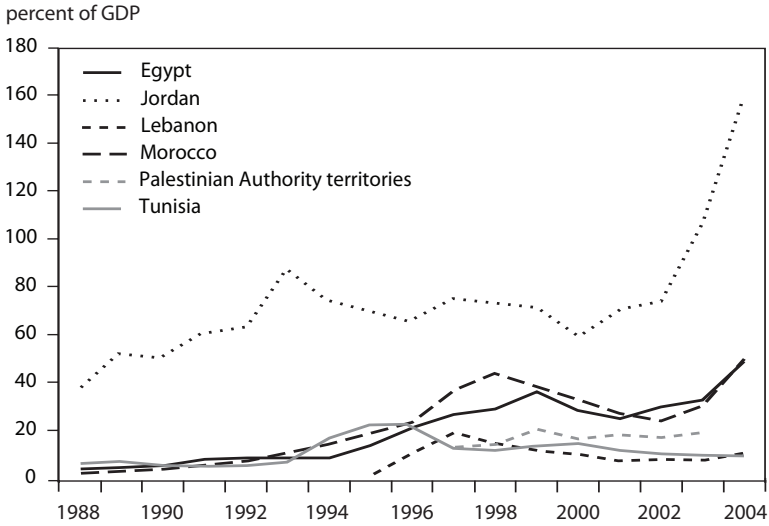
Trends in capital-market development are obscured in part by the correlation between commodity prices and stock valuations, especially in the markets in the oil-producing countries (figures 4.6a and 4.6b). Currently, of the Arab countries, only Egypt, Jordan, and Morocco are constituents of the widely used MSCI Emerging Markets equity index, each with minuscule (0.3 percent or less) benchmark weights, and at least one attempt to assess capital-market development on a comparative basis concluded that the region trailed other countries at similar income levels (Hoekman and Messerlin 2002). Another pair of researchers found that in 2001, prior to the current run-up in stock prices, market capitalization and turnover ratios in Egypt, Jordan, Morocco, Saudi Arabia, and Tunisia averaged 26 and 6 percent respectively, compared with 33 and 20 percent for developing countries as a whole (Bolbol and Omran 2005). They described Arab stock markets as a "sideshow" characterized by opaque family ownership, weak prudential regulation, few listings, and ubiquitous restrictions on investment.[34] In the words of the World Bank (2006a, 67), bond markets are "almost nonexistent outside the GCC."

Nevertheless between 2001 and 2005, asset prices rose by dot-com proportions, driven by the worldwide liquidity glut, rising oil prices, and an increased reluctance to invest outside the region in the wake of the 9/11 terrorist attacks, which could be interpreted as an increase in home-bias. The market capitalization of the six stock exchanges of the main oil exporters tripled to $875 billion, and July 2005 price-earnings ratios on the stock exchanges of Saudi Arabia (38), the United Arab Emirates (38), and Jordan (40) stood at more than double that in other emerging markets. Saudi Arabia's market capitalization reached three times its national income, despite the fact that the "tradable" share of the economy is relatively small due to the prominence of nontraded public corporations in the Saudi economy. A boom in initial public offerings (IPOs) accompanied the run-up in asset prices.[35] These IPOs have been routinely oversubscribed, and

34. See also the papers contained in Hussein and Omran (2005) for analyses of the efficiency of Arab country stock markets.

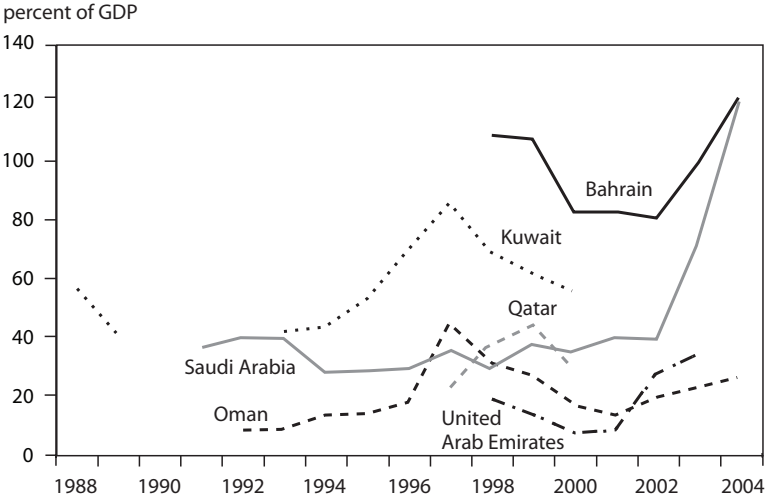
35. The IIF (2005) estimates that in the GCC countries, $1.8 billion was raised through IPOs in 2004, with a further $4 billion raised through this channel in the first half of 2005. Observers have predicted considerable future increases; one locally based investment banker anticipates $5 billion to $10 billion in additional IPOs in the Gulf over the three years running through mid-2008. See Roula Khalaf, William Watts, and Gillian Tett, "Sky-High: Arab Economies Are Booming Amid Strong Liquidity and Patchy Reforms," *Financial Times*, July 6, 2005; and Stephen Negus and Christopher Brown-Humes, "Markets in Gulf See Big Falls as Bull Run Falters," *Financial Times*, March 15, 2006. How much of this projected activity survives the 2006 downturn remains to be seen.

Figure 4.6a Market capitalization, normally endowed countries, 1988–2004



Source: World Bank, *World Development Indicators*, May 2006.

Figure 4.6b Market capitalization, resource-rich countries, 1988–2004



Source: World Bank, *World Development Indicators*, May 2006.

some observers argue that this underpricing was by design, effectively creating rents that could be allocated to insiders.[36] This allegation, if true, is particularly pernicious in the case of privatizations, where public assets were in effect transferred to insiders through the IPO process, a development that might have been precluded with some attention to Eastern European privatization efforts. Three cabinet ministers in Qatar were sacked after one such episode.

Financial-sector activity in the oil-rich states has had significant spillover effects in other Arab countries. The Shuaa Capital Arab Composite index, which tracks 254 companies in 12 Arab countries, was up 63 percent in the first half of 2005, on top of 60 percent gains in 2003 and 2004. In the well-worn tradition of using hydraulic metaphors for financial-market activity, one commentator observed "the oil money pouring in is akin to pushing Niagara Falls through a kitchen faucet."[37] This observation suggests a strong element of "contagion" from the oil-rich to other nations.

The danger, of course, is that any collapse in the former will have serious real side effects due to the same contagion as has occurred several times in the last decades in emerging markets, and indeed, asset prices began to fall in late 2005. The decline accelerated in early 2006, and on "Black Tuesday," March 14, 2006, markets throughout the region declined, with the Dubai market falling 12 percent following a regulatory change that encouraged Saudi investors to sell on margin calls.[38] As of December 2006, the Saudi and Dubai markets are down roughly 60 percent from their peaks (figure 4.7).

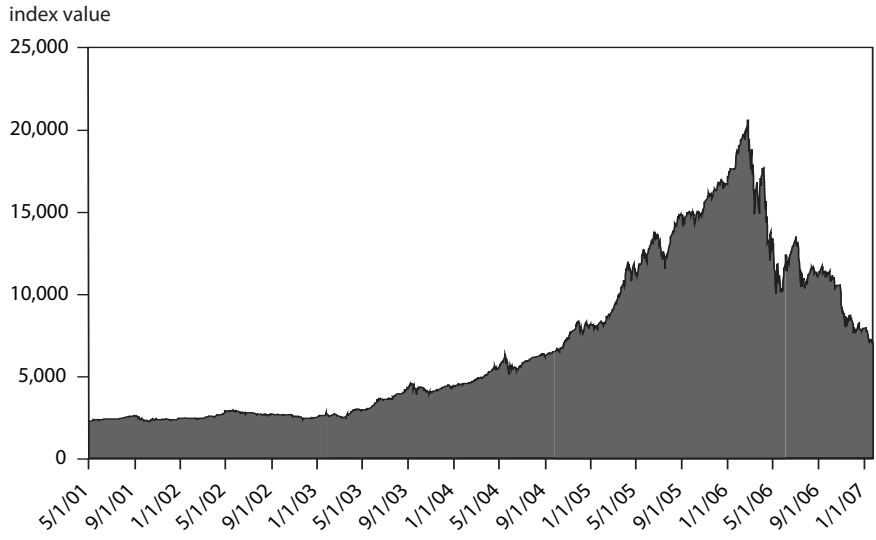
Whether this decline is simply a "pause" or "correction" in the context of a long-run bull market or whether it amounts to something more sustained remains to be seen. In the past, when financial markets in the region have collapsed, sometimes associated with scandals, local governments have tended to intervene to protect investors, attempt to restore confidence, and perhaps unintentionally create moral hazard, extending

36. Illustrative of the hothouse atmosphere was the May 2005 IPO of the UAE-based Aabar Petroleum Investments. The company had sought to raise $135 million in capital, but its offering was more than 800 times oversubscribed, with investors submitting pledges totaling $107 billion! The UAE central bank subsequently found that four local banks had excessively leveraged subscribers but did not divulge the names of the firms. Four months later, police had to be called to quell a riot that broke out when crowds of retail investors descended on local brokerages to invest in an IPO that was 139 times oversubscribed (Steve Negus, "After the Growth, Dubai Exchange Aims to Fill Trading Void," *Financial Times*, February 22, 2006).

37. Vito Racanelli, "European Trader," *Barron's,* May 23, 2005. See also John Dizard, "The Middle East Offers Fertile Soil for Value Hunters," *Financial Times*, March 14, 2006.

38. The Saudi bourse regulator was dismissed in May 2006, and the market rose 17 percent (equivalent to roughly 8.5 percent of GDP) in the two days following the appointment of his successor. Somehow it is hard to believe that one individual could single-handedly impede the economy on this scale.

Figure 4.7 Saudi stock market (TASI) closing price, May 2001–January 2007



Source: Tadawul Stock Market Performance, www.tadawul.com (accessed June 13, 2006).

and even exacerbating the crisis. For example, in 1977 the government of Kuwait responded to a relatively small stock market crash by bailing out investors and introducing stricter regulations. These actions had the unintended effect of encouraging the development among less risk-averse investors of an unofficial market in postdated checks, which in turn experienced a much larger crash in 1982. During the March 2006 episode, the Kuwait state investment authority injected funds into the market. To be clear, Kuwait is not alone in this regard: The Saudi government also announced in May 2006 a plan to establish a "risk-free fund," in effect creating a one-way bet, for lower-income first-time investors, generously defined.[39] It also relaxed restrictions on foreign investors.

The possible bubble is not limited to stocks, either: Under construction in Dubai is what is to be the world's tallest building, as well as the world's largest shopping mall, to go along with the world's only 7-star hotel, Burj Al Arab (shown on the cover of this book). A land reclamation project, allegedly the only man-made structure visible from the moon, is whimsi-

39. The Saudi action hints at the possible social repercussions of the downturn. Trading on the Saudi exchange was reportedly dominated by retail investors, despite the existence of little Arabic-language research on these stocks. Day trading had reached epidemic proportions prompting the minister of education to rebuke public-school teachers for neglecting their official responsibilities in favor of punting.

cally creating new parcels in the shape of existing continents, allowing investors to "buy Australia" or "live in South America" without ever leaving home. Similar, if less grandiose, projects are under way throughout the Gulf. Despite large volumes of additional commercial and residential stock coming to market as a result of this building activity, real estate prices have risen sharply, with some investors in Dubai reportedly realizing returns of 20 percent per month.

Such developments pose obvious risks: One is the distortion of investment decisions or simple resource misallocation. One view (Bolbol and Omran 2005) that Arab stock markets exert little influence on resource allocation suggests limited real side potential damage of a stock market bubble. However, local banks are heavily invested in local real estate and have permitted borrowers to use their loans for stock market investments. In the case of IPOs, the IIF estimates that some banks were lending up to 20 times the cash contribution of the subscriber. Real estate and stocks, in particular, lend themselves to sharia-compliant instruments and hence are a natural component of the portfolios of Islamic financial institutions. A fall in the price of oil could not only pull down local stock and real estate prices but also bring down the banking sector with it (Texas in the 1980s or Japan in the 1990s), contributing to subpar growth while the financial sector is rehabilitated and transmitting real-side shocks to the neighbors through financial-market linkages. Recognizing these growing risks, in 2005 the UAE central bank set a limit on commercial bank lending for IPOs at five times the cash contribution of the subscriber.[40]

A subtle and important issue in this regard is the extent to which the increase in post-9/11 home-bias in investor preferences has translated into an increased demand for local assets as distinct from regional assets more broadly. While many of the region's bourses are up strongly, this is not uniformly the case: The market in Morocco, geographically and culturally furthest from the Gulf, was actually down, partly due to issuance for the first time in the local market of a dirham-denominated bond by the International Finance Corporation, the World Bank group's private-sector arm. This bond at least temporarily reduced demand for other local assets including stocks. The point is that the impact of rising oil prices, positive or negative, on asset-market returns is unlikely to be felt uniformly across the region.

As a consequence, the role of foreign investors from outside the region could be potentially important. These investors may differ from local investors in their capacity to evaluate risks and returns, and they may be subject to a different set of liquidity shocks. Their participation could re-

40. This parallels the preemptive action of the Philippine central bank prior to the Asian financial crisis that enabled the Philippines to fare better than some of its neighbors (Noland 2000).

duce market volatility. Not surprisingly the run-up in oil prices and ample liquidity have attracted Western financial-service providers to the Gulf.[41]

In this regard the financial markets of the region differ considerably, in size, sophistication, and restrictions on foreign investors or service providers. Foreigners, for example, accounted for more than 40 percent of ownership on the Amman Stock Exchange (with foreign Arabs accounting for more than 60 percent of this total), while in Saudi Arabia foreigners are forced to invest through a limited number of locally controlled funds, and even other Gulf investors reportedly account for less than 5 percent of ownership. Historically, the weak financial sector and the only average growth of the real economy account for the relatively meager inward portfolio investment, and in relative terms the Arab countries lag their comparators, by large margins in some cases (table 4.12). However, the reported figures undoubtedly understate current investment flows, at least in absolute terms, for countries like Egypt and Jordan that benefit from proximity to the Gulf and Tunisia and Morocco, which have encountered at least modest success in tapping the growing market for emerging-market debt. (Egypt, Lebanon, Morocco, and Tunisia are constituents of the commonly followed JPMorgan Emerging Bond Index Global, each with small weights; so for example, the PIMCO Emerging Market Fund, one of the largest US-based mutual funds, allocates about 4 percent of its portfolio to these countries.)

Conclusion

The Middle East is under multiple stresses. It is imperative that it rapidly generate employment to absorb new labor force entrants. One of the demonstrably effective ways of quickly creating employment is through expansion of labor-intensive manufacturing and service exports. But the region is lagging in its effort to globalize, trailing a diverse set of competitors that have already established strong footholds in global production and trade networks.

Until recently the Middle East's traditional safety net of financial flows generated by strategic location and mineral rents had been eroding, making it more difficult to finance capital accumulation and to pay for social overhead capital necessitated by the rapid population increase. In this regard the rise in oil prices since 2003 has ambiguous effects: On the one hand it potentially increases investable capital for the region as a whole, on the other it is likely to dampen the urgency of reform, leaving these economies even more vulnerable if the oil price trend reverses. In the next chapters we explore some of the determinants of the Middle East's

41. The 2005 IPO for Dana Gas in Abu Dhabi reportedly earned the 10 receiving banks $270 million in fees and profits off margin loans to investors (Will McSheehy and Lina Saigol, "Petro-Dollars Lure a Wave of Foreign Bankers to Gulf State," *Financial Times*, December 6, 2006).

Table 4.12 Cumulative portfolio investment (billions of current US dollars)

	Total			Bonds			Equities		
Country	**1980–89**	**1990–99**	**2000–2004**	**1980–89**	**1990–99**	**2000–2004**	**1980–89**	**1990–99**	**2000–2004**
Middle East									
Algeria	0.0	n.a.	n.a.	0.9	−1.5	0.0	0.0	0.0	0.0
Egypt	0.0	1.4	1.2	−0.1	0.1	1.4	0.0	1.0	0.2
Jordan	0.0	0.0	−1.6	0.0	−0.1	−0.6	0.0	0.0	−0.4
Kuwait	−2.1	−18.4	−50.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	0.0	0.5	0.6	−0.2	0.3	0.3	0.0	0.5	0.6
Saudi Arabia	−26.1	9.0	−50.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Syria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tunisia	0.4	0.4	0.0	0.0	1.5	1.6	0.0	0.3	0.0
High-performing comparators									
South Korea	0.8	74.7	46.7	2.0	38.3	n.a.	0.0	41.9	n.a.
Taiwan	−0.2	0.0	0.0	0.2	4.3	11.6	−0.4	23.4	62.7
Large comparators									
China	4.1[a]	1.0	−2.6	4.7[b]	10.3	4.9	0.0	7.0	28.7
India	0.0	14.7[c]	14.4[e]	2.3	6.7	5.9	0.4	17.0	23.3
Normally endowed comparators									
Bangladesh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Brazil	−1.6	145.1	2.5	−2.0	26.8	9.7	0.2	30.7	12.6
Pakistan	0.5	2.9[d]	−0.8[g]	0.0	0.7	−0.1	0.0	2.4	0.0
Turkey	3.0	7.8	6.4	4.2	15.6	8.9	0.0	2.4	2.7
Resource-rich comparators									
Botswana	0.0	−0.1	−1.0[e]	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.6[b]	8.3	−0.9[f]	0.5	8.6	−1.7	0.4	−3.1	3.6
Nigeria	2.8	1.3	2.0	0.0	0.0	−0.5	0.0	0.0	0.0
Venezuela	2.6	20.3	−7.2	−0.1	3.4	0.1	0.0	4.4	−0.6

n.a. = not available

Notes: Total figures exclude liabilities constituting foreign authorities' reserves except South Korea and Taiwan. Figures for these are taken from different sources and are not completely comparable to the others. All figures are in current dollars and thus only approximate cumulative investment.

a. 1982–89; b. 1981–89; c. 1990–98; d. 1990–97; e. 2000–2003; f. 2000–2002; g. 2002–04.

Sources: South Korea bonds and equities: Bank of Korea Economics Statistics System; Taiwan: Central Bank of China, Republic of China (Taiwan), Balance of Payments Statistics, www.cbc.gov.tw; Others: World Bank, *World Development Indicators*, May 2006.

performance and the inability of some countries to transform a favorable set of economic parameters into better growth.

Current countervailing trends such as oil price increases and their spillover dampen the need for immediate economic reform while the absence of future aid inflows and greater competition militate in favor of it. Moreover, the growing popular discontent in many of the Arab countries makes further reform urgent, particularly to create more jobs, while at the same time it makes reform more risky as some of the reforms will have adverse short-term consequences such as a reduction in the number of jobs.

Appendix 4A
Labor Force Absorption

Assume a national production function that is Cobb-Douglas,

$$Q = AK^{\alpha}L^{1-\alpha} \tag{4A.1}$$

The equilibrium condition in the labor market is

$$F_L = A(K/L)^{\alpha} = w/p \tag{4A.2}$$

where F_L is the marginal product of labor, w/p the real wage, and A an index of total factor productivity (TFP). The rate of growth of employment is then

$$L^* = [A^* + \alpha K^* - (w/p)^*]/\ \alpha \tag{4A.3}$$

where L^* is the rate of growth of employment, A^* is the rate of growth of TFP, K^* the rate of growth of the capital stock, which depends largely on the national investment rate, and $(w/p)^*$ is the rate of growth of the real wage. The rate of job creation is increased by additional investment with which labor is complementary and decreased by any growth in the real wage firms pay. Greater growth in TFP also increases job creation as it increases the marginal product of labor.