
Risk, Credibility, and Supply Response

The Arab countries confront a number of microeconomic issues that appear to limit the growth of productivity. These involve local policies and practices and do not require international intervention to resolve, though external policy anchors as discussed in the previous chapter may be useful. The intraregional variation in their severity also implies that these policies and practices are not culturally or religiously predetermined, implicitly steering the analysis toward interest group politics as conventionally understood. The models reviewed in the previous chapter, which have calculated (modest) benefits from trade agreements, as well as much of the advice coming from multilateral institutions, assume that increased supply will be forthcoming in response to policy change. This chapter examines the validity of this critical assumption. For heuristic purposes we consider three potential sources of supply response: first, local firms and entrepreneurs; second, returnees from the large Arab emigrant community outside the Middle East; and third, foreign firms and investors. In reality the distinction is imperfect: Presumably one of the ways that domestic supply response would be manifested is through the integration of local firms into transborder supply networks. We then consider how perceptions are formed of local economic, political, and security risk by domestic entrepreneurs, foreign investors, and returnees and how high subjective risk might be reduced. This consideration inevitably involves discussion of the “enduring authoritarianism” of Middle Eastern political regimes, the likelihood of liberalizing change, and the obstacles domestic reformers face, which are taken up in the next chapter. We conclude this chapter by raising the possibility of a virtuous circle in which political reform could

reduce risk, which would in turn lead to an expansion in cross-border economic integration and rising incomes, which facilitate more extensive economic and political reforms.

Domestic Entrepreneurship

The natural place to begin a discussion of supply response to policy change is with local firms and entrepreneurs. They presumably have the best information about “facts on the ground” and are best placed to seize opportunities that policy change presents.

Unfortunately, systematic evidence on the nature of entrepreneurship and the environment within which it acts in developing countries in general and the Middle East in particular is just beginning to emerge from large-scale surveys funded by the World Bank. As a consequence, our understanding, at least in a quantitative sense, of how the Middle East stacks up in terms of establishing an economic environment that fosters entrepreneurship is highly limited. Regulatory requirements appear to significantly raise the costs of forming new businesses (table 9.1), operating them once under way (table 9.2), as well as terminating failed ones (table 9.3). As discussed in chapter 4, the regulatory hurdles to business formation are reinforced by a financial system that tends to channel capital to investment in government bonds or loans to large, established, and possibly politically connected enterprises, rather than small and medium-sized enterprises (SMEs) and start-ups (table 4.12). Respondents in the survey conducted by Jamel Zarrouk (2003) cited the inability to enforce contracts as the single biggest problem in doing business within the region once a business is started. Barriers to exit may actually exacerbate the financing problems for SMEs: If creditors cannot be assured of being able to seize the assets of bankrupt enterprises in a timely manner, they will not lend in the first place. According to the World Bank (2006b), in Syria and Morocco, collateral averages more than twice the value of the loan. In Egypt, court approval for seizure of immovable collateral can take seven to eight years. That said, a comparison of the most recent indicators with those derived from earlier surveys done in the 1990s suggests that there have been improvements of late.

The relatively high cost of both entry and exit presumably deters business formation, dampens competition, and reduces efficiency. Among the Arab countries, Egypt scores particularly poorly on these measures while Tunisia rates the best, with Morocco and Jordan taking intermediate positions. This evidence is consistent with the fact that over the past generation Tunisia is the only Arab country to exhibit unconditional convergence in per capita income with the Organization for Economic Cooperation and Development (OECD) as documented in chapter 2. Indeed, this suggests that these indicators may be endogenous—Tunisia may score better because it

Table 9.1 Starting a business

Country	Number of procedures	Time (days)	Cost (percent of income per capita)	Minimum capital (percent of income per capita)	Domestic competition: Administrative burden for start-ups (percentile^a)
Middle East					
Algeria	14	24	25.3	55.1	18
Bahrain	n.a.	n.a.	n.a.	n.a.	83
Egypt	10	34	104.9	739.8	35
Jordan	11	36	45.9	1,011.6	72
Kuwait	13	35	2.2	133.8	n.a.
Lebanon	6	46	110.6	68.5	n.a.
Morocco	5	11	12.0	700.3	53
Oman	9	34	4.8	97.3	n.a.
Palestinian Authority territories	11	106	275.4	1,409.8	n.a.
Saudi Arabia	13	64	68.5	1,236.9	n.a.
Syria	12	47	34.5	5,111.9	n.a.
Tunisia	9	14	10.0	29.8	89
United Arab Emirates	12	54	44.3	416.9	92
Yemen	12	63	240.2	2,703.2	n.a.
High-performing comparators					
South Korea	12	22	15.2	308.8	59
Taiwan	8	48	6	216.3	88

(table continues next page)

Table 9.1 Starting a business (continued)

Country	Number of procedures	Time (days)	Cost (percent of income per capita)	Minimum capital (percent of income per capita)	Domestic competition: Administrative burden for start-ups (percentile ^a)
Large comparators					
China	13	48	13.6	946.7	70
India	11	71	61.7	0	55
Normally endowed comparators					
Bangladesh	8	35	81.4	0	24
Brazil	17	152	10.1	0	9
Pakistan	11	24	24.4	0	13
Turkey	8	9	27.7	20.9	60
Resource-rich comparators					
Botswana	11	108	10.9	0	49
Indonesia	12	151	101.7	97.8	69
Nigeria	9	43	73.8	43.3	25
Venezuela	13	116	15.7	0	4

n.a. = not available

a. Larger percentile indicates less administrative burden.

Sources: World Bank, *Doing Business 2006* database (accessed, June 12, 2006); Administrative burden for start-ups: *Global Competitiveness Report 2004–2005*.

Table 9.2 Enforcing contracts

Country	Number of procedures	Time (days)	Cost of enforcing contracts (percent of debt)
Middle East			
Algeria	49	407	28.7
Egypt	55	410	18.4
Jordan	43	342	8.8
Kuwait	52	390	13.3
Lebanon	39	721	26.7
Morocco	17	240	17.7
Oman	41	455	10.0
Palestinian Authority territories	26	465	21.4
Saudi Arabia	44	360	20.0
Syria	47	672	34.3
Tunisia	14	27	12.0
United Arab Emirates	53	614	16.0
Yemen	37	360	10.5
High-performing comparators			
South Korea	29	75	5.4
Taiwan	28	210	7.7
Large comparators			
China	25	241	25.5
India	40	425	43.1
Normally endowed comparators			
Bangladesh	29	365	21.3
Brazil	24	546	15.5
Pakistan	46	395	35.2
Turkey	22	330	12.5
Resource-rich comparators			
Botswana	26	154	24.8
Indonesia	34	570	126.5
Nigeria	23	730	37.2
Venezuela	40	445	28.7

Source: World Bank, *Doing Business 2006* database (accessed June 12, 2006).

has a vibrant business sector, which has successfully influenced the government to maintain a relatively efficient environment. Successful economic performance also contributes to higher tax revenues, which may enable the government to recruit more highly paid, capable, and less corruption-prone individuals and implement administrative systems that offer fewer opportunities for corruption.

Table 9.3 Closing a business

Country	Time (years)	Cost (percent of estate)	Recovery rate (cents on the dollar)
Middle East			
Algeria	3.5	4	37.5
Egypt	4.2	22	16.2
Jordan	4.3	9	27.9
Kuwait	4.2	1	38.4
Lebanon	4.0	22	18.6
Morocco	1.8	18	35.1
Oman	7.0	4	25.0
Saudi Arabia	2.8	22	28.4
Syria	4.1	9	28.6
Tunisia	1.3	7	51.6
United Arab Emirates	5.1	30	5.5
Yemen	3.0	8	28.3
High-performing comparators			
South Korea	1.5	4	81.7
Taiwan	0.8	4	89.5
Large comparators			
China	2.4	22	31.5
India	10.0	9	12.8
Normally endowed comparators			
Bangladesh	4.0	8	24.3
Brazil	10.0	9	0.5
Pakistan	2.8	4	44.3
Turkey	5.9	7	7.2
Resource-rich comparators			
Botswana	2.2	14	54.4
Indonesia	5.5	18	13.1
Nigeria	1.5	22	31.2
Venezuela	4.0	38	6.1

Source: World Bank, *Doing Business 2006* database (accessed June 12, 2006).

Yet even accepting the provisional nature of these indicators, compared with the countries outside the region, the Arab countries as a whole do not look so bad. Setting aside the oil producers, in terms of procedural complexity, administrative burden, and time in establishing a business, enforcing contracts, and dissolving a business, Morocco and Tunisia are superior to most of the comparators, with only South Korea, Taiwan, and Turkey generally comparable on these dimensions. However, Egypt and Syria, at the other extreme, do not fare well. Starting a formal business in

these countries is complicated and costly, comparable only to India. Operating one is not much easier: The number of procedures required to enforce a contract is higher in Egypt than anywhere else, and in Syria enforcement takes nearly two years. And if a business fails, the recovery rate is among the lowest in the sample, among the more typically endowed countries comparable only to India.

Comparing Saudi Arabia and Algeria with the other resource-abundant comparators, there is a fair amount of dispersion in the scores from indicator to indicator, but taken in totality it is hard to argue that the Arab countries are significantly worse than the relevant comparators and indeed generally score better than the others.

In sum, there is considerable variation within the Middle East, with Morocco and Tunisia comparable to the better-performing middle-income countries of the past generation, Egypt and Syria comparable to the worst, and the highly resource-endowed economies not noticeably distinct from other natural resource-based economies elsewhere. Two points are worth noting in this connection: First the institutions and practices under discussion are amenable to reform at the national level—these are internal matters and do not require the involvement of the international community, though external policy anchors may be useful. Second, the degree of intraregional variation in these indicators belies the notion that these institutions and practices are culturally or religiously determined. If it takes on average less than a month to enforce a contract in Tunisia, there is no obvious reason why it should take well over a year in Egypt.¹ Indeed, the Egyptian government of Prime Minister Ahmed Nazif has made the elimination of red tape a priority.

These are indicators of the environments in which entrepreneurs operate. One large-scale survey has attempted to track entrepreneurial activity directly across a large number of countries. The Global Entrepreneurship Monitor (GEM) project reports data on “total entrepreneurial activity” (TEA), defined as the prevalence rate among individuals aged 18 to 64 active in either the start-up phase or managing a new business. There is no information on competence, success, or survival. The study also distinguishes a TEA-necessity index defined by those who pursue start-ups because they have “no better choices for work” (in contrast to those motivated by opportunity).² Necessity can be interpreted as the absence of

1. We do not know the equivalent delay in enforcing a contract in Tunisia when it was at Egypt’s current per capita income. Thus some of the difference between the countries may reflect the growing clout of businesses as the economy grew—the endogeneity problem. Nevertheless, we doubt that this is entirely the source of the difference between the two nations.

2. “Opportunity motive” businesses amounted to 52 percent of the start-ups while “necessity motive” constituted 33 percent, and “mixed motives” accounted for the remainder. For the young business “entrepreneurial firms,” 72 percent were “opportunity” businesses, 19 percent were “necessity” businesses, and the remainder reflected mixed motives (Reynolds et al. 2004, table 15).

formal-sector employment and the imperative to initiate some income-generating activity in the “informal” sector. Considerable literature documents the importance of “informal-sector” activities in developing countries that result from the inadequate growth of jobs in the formal sector. Although definitions differ, the informal sector is characterized by small firms with low capital-labor ratios, few employees, failure to register with the government, and relatively free entry. The necessity index may capture this phenomenon, however imperfectly. It is obvious that the necessity index may be a measure of desperation rather than ability-driven entrepreneurship. Nevertheless, the data can be utilized to obtain some tentative insights into the potential entrepreneurial supply in the Middle East.

These data were derived from more than 100,000 interviews conducted in 31 countries in 2003 (Reynolds et al. 2004).³ Compared with the entire universe of firms, the associated businesses tend to be the transformative (construction, manufacturing, transportation, and wholesale) and business services sectors. The indices measure the extent of business formation—only implicitly do they shed any light on survival rates, and again the raw numbers may reflect other environmental characteristics as discussed below.

The entrepreneurship indices are correlated with a number of country characteristics (Reynolds et al. 2004, tables 17 and 18). Entrepreneurial activity is associated with populations with large shares of young adults, and men are twice as likely as women to be involved in start-ups, though women are relatively more active in developing countries. A supportive cultural context in which entrepreneurship is valued and regarded positively (as measured by survey responses and local media coverage) is associated with greater entrepreneurship, but personal networks and contacts have an even larger impact—people who know entrepreneurs are significantly more likely to become entrepreneurs themselves. Educational attainment and socioeconomic status affect the form that entrepreneurship takes—the poor are more likely to be entrepreneurs out of necessity.

The entrepreneurship indices are correlated with both past and future income growth rates, though the persistence of the indices from year to year suggests that the cross-country incidence of entrepreneurship is not driven purely by the pattern of macroeconomic shocks (Reynolds et al. 2004, tables 1 and 16). Indeed, there is also a set of structural or institutional correlates that would appear to represent implicit and explicit opportunity costs associated with involvement in a new business, including the level of public-sector employment (possibly representing the availability of low-risk employment), collected tax revenue, employer contributions to social security, and total social security costs. All of the size of

3. Interviews were conducted in 41 countries over 2000–2003.

government or government burden indicators are negatively associated with entrepreneurship, with the employer social security costs having the largest negative impact on “opportunity” start-ups. These correlations suggest that there is an economic calculus as well as a pure demographic component to the TEA indices.

Lastly, there is a set of variables that could be interpreted as implicit entry barriers to new firms including the cost of registering a new firm and an index of “economic freedom.” Interestingly, these tend to be positively correlated with entrepreneurship, especially “necessity” entrepreneurship. The impression one gets is that institutional weaknesses as reported in tables 9.1 to 9.3 manifest themselves in weak economic performance, thereby encouraging small-scale, badly financed informal entrepreneurial activity by people unable to secure acceptable employment in larger-scale established enterprises. Similarly, there are strong negative correlations between performance on the sorts of indicators of innovative activity discussed in the previous chapters, such as the number of scientific publications, Internet usage, and the quality of intellectual property rights (IPRs) protection, and entrepreneurship by necessity. Again, weak local technological performance is associated with poor performance (whatever the specific direction of causality) contributing to necessity-driven entrepreneurship. This description would appear to be a reasonably good capsule description of the economic environment of the more distorted Arab economies.

Unfortunately, there are no Arab countries in the GEM sample so one cannot test this mental mapping directly. However, one can exploit the systematic correlation between the prevalence of entrepreneurship and economic and demographic variables to estimate how the Arab countries might rank under the assumption that entrepreneurship in the region adhered to the same statistical relationship. Ideally one would want to construct a model of demand and supply of entrepreneurship, distinguishing between total entrepreneurship and entrepreneurship resulting from the absence of formal sector jobs. Instead, given the limitations of the data, we will report a simple, reduced form relationship between the TEA prevalence rate and a handful of the most robust correlates.

Across countries, the TEA prevalence rate is inversely correlated with the level of per capita GDP, the growth rate of per capita income over the previous five years, and the unemployment rate over the previous three years. All of this implies that poor economic performance drives much of the activity. Indeed, all of these variables are likely to be associated with the generation of formal-sector jobs but the correlation is weak—for example, recent rapid growth in India has been accompanied by little growth in formal sector employment, a pattern similar to that noticed four decades ago in Latin America (Baer and Hervé 1966). It is also highly positively (negatively) correlated with the share of younger (older) male or female

adults in the population.⁴ A cross-country regression of these variables against the TEA index explains a bit less than two-thirds of the sample variation.⁵

Under the possibly heroic assumption that the pattern of potential entrepreneurship in the Middle East conforms to the cross-country statistical norm, one can use the estimated regression to project what the Arab countries' TEA scores would have been if they had been included in the sample. These are reported, along with the actual values of the sample countries, in table 9.4. The Arab countries tend to clump toward the upper end of the distribution, partly a function of their relatively young populations. Setting aside the oil exporters, the projected values for Syria and Jordan approximate Thailand; Egypt and Morocco fall into an interval defined by India and Argentina on the upper bound and Chile and South Korea on the lower bound. Tunisia is between Mexico and China, while Algeria scores the lowest, in the range of Australia and Ireland.

Obviously these are very rough indicators, and one should not lean too heavily on either the original index or the associated projections. The main message though of these results is that in quantitative terms there is no reason why the Arab world should be expected to exhibit uniquely low entrepreneurship. This is mixed news as some of the result is driven by bad economic performance, but conditional on this, the demographic and economic characteristics of the countries suggest there is a pool of potential responders, purely in terms of numbers without any information on probable quality. In sum, assuming that entrepreneurial instincts and responses to economic opportunity are reasonably similar across nations, in similar environments the demographic features of the Arab countries are conducive to the emergence of local firms.

This exercise raises three related issues. First, is the entrepreneurship actually there, and importantly, is it competent or simply a measure of the failure of the economies to afford stable employment growth? We can observe the predicted values based on a statistical model, but we cannot observe whether in fact reality conforms to this prediction. The results cited in earlier chapters on the quality of institutions of higher learning are not particularly encouraging with respect to technical ability. Second, suppose that entrepreneurship is not observed—is it due to something intrinsic or is it reflective of other problems in the business environment or

4. There is a very high degree of collinearity among these variables. Of these four variants, the younger adult female share was slightly more correlated, and this regression specification is used to construct table 9.4. The choice among these four variants made no material difference to the results.

5. The regression is $TEA = 25.78 (1.27) - 3.24 \ln \text{GDP per capita} (2.44) - 0.93 \text{ GDP per capita growth } 1998-2002 (2.72) + 0.80 \text{ share of young women} (2.52) - 0.42 \text{ rate of unemployment} (2.64)$; $R^2 = 0.65$; $n = 40$. All of the explanatory variables were statistically different from zero at the 5 percent confidence level.

Table 9.4 Total entrepreneurial activity values and projections

Country	Value	Country	Value
Uganda	29	Norway	8
Venezuela	27	Switzerland	7
Saudi Arabia	26 ^P	Israel	7
Kuwait	25 ^P	Greece	7
Yemen	23 ^P	Hungary	7
Syria	22 ^P	Spain	6
Jordan	20 ^P	Denmark	6
Thailand	19	United Kingdom	6
India	18	Finland	6
Argentina	17	South Africa	6
Egypt	17 ^P	Singapore	5
Morocco	17 ^P	Germany	5
Chile	16	Italy	5
Korea	15	Poland	4
New Zealand	14	Slovenia	4
Brazil	13	Taiwan	4
Mexico	12	Sweden	4
Tunisia	12 ^P	Netherlands	4
China	12	Belgium	3
Iceland	11	Hong Kong, China	3
United States	11	Croatia	3
Australia	10	Russia	3
Algeria	10 ^P	France	2
Ireland	9	Japan	2
Canada	9		

p = projections (using authors' calculations)

Note: Higher value is better.

Source: Reynolds et al. (2004).

deeper hostility to entrepreneurship in the political system? Put differently, if the Syrian financial system were not so repressed, would we observe a much higher level of activity among young energetic entrepreneurs who are currently capital-starved, or would it serve to undermine the symbiotic relation between the Alawite-based security services and the Sunni-dominated business interests?

Obviously, the extent of local entrepreneurial response and the policy environment are related. Reform of the previously documented microeconomic impediments combined with the maintenance of macroeconomic stability should, in principle, stimulate growth provided that there is a responsive entrepreneurial class. The analysis in chapter 6 showed that few of the conventional measures of policy have had a significant effect on cap-

ital accumulation or total factor productivity (TFP) growth. Three measures of the impact of general “macroeconomic” quality, namely inflation, the budget balance, and the Sachs-Warner measure of openness, are significant. Of the “second-generation” reform measures, that of “institutional quality” taken from the international country risk guide index is the only statistically significant one of 15 measures.

As noted in chapter 6 most of the Arab countries have done reasonably well on macro reforms, while micro reforms have been weaker, and the statistically significant effect of institutional quality is on TFP growth rather than capital accumulation. If this is the case, then the weaker Arab performance in this dimension could be the source of the limited supply response to improved macro policies. And the lower institutional quality, assuming it is even worse in the countries not included in the sample, might be of greater importance. From this perspective, poor entrepreneurship could be a response to an inhospitable environment rather than an exogenous factor determined by cultural or social factors.

Alternatively, good entrepreneurs could have prevailed over many of the hurdles imposed by weak institutions. A long literature in the 1950s described in detail the obstacles to growth faced by newly industrializing countries including South Korea and Taiwan.⁶ Yet these were overcome, though gradually government policies became more supportive, at least for exporters. Arguably the explicit support merely compensated for government-created obstacles, resulting in a roughly neutral regime in terms of the prices of inputs and outputs. Some of the components of institutional quality have never been particularly high in the fast-growing economies in Asia including China, India, South Korea, and Taiwan. In other countries, particularly Indonesia and Thailand, these deficiencies may have contributed to the crisis of the late 1990s, but there had been two decades of rapid growth, and retrospective analyses of the sources of the crisis assign a much greater role to other factors, particularly premature opening of the capital account and the role of short-term international flows (Furman and Stiglitz 1998, Radelet and Sachs 1998, World Bank 1998). The role of institutional quality, viewed in terms of the historical experience of individual countries, is moot, though the cross-country evidence of the association between institutional quality and growth is clear. However, the causation could of course go from growth rates to institutional quality.

To some extent, the weak business climate appears to be designed to channel rents to politically connected local residents. The Egyptian intellectual Saad Eddin Ibrahim once described Saudi entrepreneurs as “lumpen capitalists”—products of the oil boom, neither traditional Arab merchants nor Western entrepreneurs taking risks with their capital but rather rentiers,

6. For a particularly thorough document that became a standard for much of the 1950s and 1960s, see United Nations (1955).

either portfolio investors or “sponsors” of nonnative entrepreneurs unable to legally operate without a Saudi partner (Ibrahim 1982).⁷

But what if the problem is deeper, reflecting a fundamental antipathy to sources of power and prestige beyond direct state control? A commonly heard complaint throughout the region is that decades of Arab socialism have dampened traditional Arab entrepreneurial instincts. Yet Clement M. Henry and Robert Springborg (2001) go further, documenting the hostility of the Algerian and Syrian regimes, for example, to the existence of an autonomous private business community—suggesting not just a dulling of entrepreneurial instincts but an active attempt to emasculate them. Such tendencies perhaps reached their apotheosis (or nadir depending on one’s perspective) in Libya, where private property and employer-employee relations were banned under the revolutionary *Jamahiriyah* ideology of strongman Muammar Gadhafi following his seizure of power in 1969. These proscriptions were relaxed in the late 1980s for anyone brave enough to try, but this legacy and associated uncertainty about property rights and criminal liability continue to impede development of a vibrant private sector in Libya.

This relates to a potentially fundamental issue, namely the absence of a private entrepreneurial class with technological and marketing skills in manufacturing that would enable them to participate in the international economy.

The region has a large number of individuals with considerable business acumen, though often in wholesaling and retailing rather than in manufacturing or advanced services. One interpretation is that the Arabs appear to have gotten the worst of all worlds: the deadened entrepreneurial instincts of socialism but without the accompanying rigorous Soviet bloc technical education.⁸ The latter had high quality and levels of formal education including in engineering and science but little entrepreneurial activity for 40 (Eastern Europe) to 75 years (the former Soviet Union). In contrast, some of the Middle Eastern economies display considerable trading acumen but quite low levels of technical skill, a combi-

7. Stephen Glain (2004) documents a similar “sponsor” phenomenon in financially repressed Syria, where the politically connected extract rents from entrepreneurs for enabling them to access the state-owned banking system. The description by Henry and Springborg (2001, 126) is worth quoting at length: “The bargain consists of deals between individual Alawi patrons and Sunni capitalist clients whereby the former provide protection, contacts, and permissions for services rendered. That bargain underpins the political economy of Syria, thereby preserving Alawi rule, but at the cost of more rapid economic growth, as rent seeking, requiring as it does an absence of transparency and accountability and militating as it also does against export-led growth, has devoured the country’s resources.”

8. Dan Magder (2005) provides the example of Egyptian textile and apparel managers—who were socialized in the Nasserist era, reflecting the impact of Egypt’s Soviet patron—lacking marketing skills or even the sense of a need for marketing of big orders and placing little emphasis on product quality or the need to respond to customer preferences.

nation that has considerable implications for understanding past and potentially future performance.

However, another interpretation is that the emphasis on trading and other businesses amenable to “mobile capital” is not necessarily due to technical weakness but rather is a rational adaptation to a predatory environment that discourages investment in large fixed facilities that could be subject to seizure.⁹ The good news is that under different governance, one might see a resurgence in technically competent entrepreneurship. The bad news is that if the political inhibitors are this deep, substantial investment in technology, education, or other precursors are unlikely to manifest themselves in economic dynamism.

Ironically, this underlying political logic establishes a dynamic in which foreign entrepreneurs are actually preferred, posing less of an implicit threat to the political regime. The complementary economic logic is that larger foreign multinational firms have diversified portfolios and may fear predation less than local capitalists and hence are more willing to make irreversible industrial investments. A development strategy based on foreign investors can work as the experience of Southeast Asia in particular demonstrates.¹⁰ The Asians were accommodating to these investors, however.

Apart from the extractive sector, where geology determines the location of production, the problem for the Arab countries is actually attracting that investment in a competitive world. The issue for the Middle East is how to transform the local economy through internal and external drivers in a way that would enable the capture of latent opportunities presented by globalization. Is there any way of using foreign connections to strengthen local capacity or circumvent its weakness? In the next section we take up the possibility of attracting returnees from abroad and then follow with an analysis of the perceived risks in investing in the Middle East from the standpoint of foreign investors.

9. See Henry and Springborg (2001), particularly with respect to Syria.

10. The starkest case is Singapore, whose industrial growth was largely dependent on foreign direct investment intensively encouraged by the government. But Indonesia and Malaysia also were heavily dependent on such investment, some sourced from the ethnic Chinese diaspora around the Pacific Rim (Cheong 2003). In Hong Kong and Taiwan, both of which followed a path of encouraging small and medium-scale enterprises, many of the entrepreneurs had been industrialists in pre-Communist China and had fled to these countries. Although it may be assumed that the technical and marketing skills of the mainland of the 1930s were not the same as those required in the 1960s and 1970s, neither were they different in kind but in quality and could be learned fairly rapidly. Even here, in the new rapidly growing sectors, foreign skills were important such as those transmitted by the buying offices established by large wholesalers and retailers based in the OECD countries that provided design and quality control knowledge to local firms (Lall and Keesing 1992; Rhee, Ross-Larson, and Pursell 1984).

Reversing the Brain Drain

Returnees who received training or work experience in more advanced institutions abroad might provide a potential synaptic link between local economies and the opportunities presented by the global economy. These returnees played an important role in the industrial development of South Korea and Taiwan, encouraged by the cultural pull of the homeland (particularly in relation to raising children) and sometimes supported by public policy that consciously targeted emigrant engineers and scientists. For example, in the case of Taiwan, the government established a science park and provided tax and financial inducements for Taiwanese abroad to return to Taiwan and establish high-technology firms. Much of today's booming high-technology sector in Taiwan can trace its origins to firms established by returnee scientists and engineers under these programs. Similarly, as discussed in box 9.1, nonresident Indians and returnees have played a significant catalytic role in the rise of the Indian computer software industry.

Even if returnees do not establish new high-technology firms, simply reversing the brain drain, as has occurred in Ireland over the past generation, would amount to raising the social rate of return on educational investment, conceivably by a significant margin. More systematic economic studies have documented the impact of cultural affinity in general and diaspora communities in particular on trade and investment flows.¹¹ The issue is whether Arab communities in North America and Europe can play a similar role in revitalizing the Middle East.

Arabs in North America

The North American Arab community is relatively small: The 2000 US census identifies 850,000 people of exclusively Arab ancestry and a larger group of 1.2 million people if those of mixed ancestry are included (Brittingham and de la Cruz 2005). In addition there are roughly 195,000 Arabs in Canada, with another 40,000 having mixed Arab and European ancestry, according to Canadian government statistics.¹² The composition of the North American Arab community does not mirror the population profile of the Middle East: In the United States, Lebanese (29 percent) are the single largest group, followed by Egyptians (15 percent). Twenty percent

11. On the role of cultural affinity, see Guiso, Sapienza, and Zingales (2004) and Noland (2005b). On the impact of diaspora communities, see Rauch (2001), Rauch and Trindade (2002), Choi (2003), Combes, Lafourcade, and Mayer (2005), and Hernander and Saavedra (2005).

12. See Statistics Canada, 2001 Census of Canada: Data and Analysis, available at www.statcan.ca.

Box 9.1 Asian experience with diaspora entrepreneurs

The potential beneficial role of returnees and foreign entrepreneurs of domestic origin can be gleaned from the Asian experience. In China, for example, “overseas” Chinese were early investors in China’s special economic zones and provided marketing and production skills to the many township and village enterprises, which were an important source of growth.

In India, as in China, foreign skills provided an important adjunct to local skills. Many of the new firms in the higher-technology sectors, especially software, were aided substantially by expatriates, who provided critical advice and in some cases infrastructure, such as a satellite. These inputs were complemented by a large flow of graduates from the Indian Institutes of Technology and other institutions (Saxenian 2002). Bangalore, the center of the industry, has an abundant supply of IT graduates from 3 universities, 14 engineering colleges, and 47 polytechnic schools.

A catalytic factor has been the transfer of skills by foreign firms. Forty-eight percent of Indian software firms are foreign owned, joint ventures, or owned by Indian nationals with intensive participation by foreigners. Although foreign wholly owned firms make up only a small fraction of the software firms in India, they account for a disproportionately large share of the investment made by the software industry and have facilitated software exports, the largest part of current sales.

Foreign firms, often staffed by Indian expatriates, also invested in India, started new Indian firms, helped raise US venture capital, organized conferences in the United States to heighten awareness of the potential of India’s software industry, and facilitated networking between Indian technology entrepreneurs and their counterparts in the United States.

Even a fairly advanced education system and a robust private sector have their greatest impact if they are part of an international network. But with some notable exceptions such as the Taiwanese experience with the Hsinchu Science Park and the Institute for Technological Research and Innovation (ITRI), most Asian research institutions have not been well connected to the international innovation system (Hou and Gee 1993). Education of more researchers without efforts to embed them in productive networks is likely to have low returns.

Moreover, the role of foreigners inevitably changes the dynamics of local power—the Indian software sector is largely beholden to government (and some would argue that is part of the source of its success). It has its own satellites, partly or totally financed by cooperating foreign firms, and is not taxed on its inputs, and its very success allows it a seat in discussions on India’s economic evolution.

of the respondents identified their ancestry as generic “Arab.” In Canada, where Lebanese also account for a majority of the Canadian-Arab community, the disparities are even more pronounced with generic “Arab” (25 percent) and Egyptians (16 percent) making up the next largest components. The North American Arab community, like many immigrant communities, is disproportionately male, 57 percent in the United States and 54 percent in Canada.

In 2000 the median age of the Arab-American community was 33 years, though there was variation within the group, with Syrians and Lebanese being the oldest (39 years) and the generic Arabs being the youngest (27 years). Almost half of the members of the broad Arab ancestry group were born in the United States (well over half in the case of the Lebanese and Syrians), while nearly half of foreign-born Arabs arrived during the 1990s. Again there is variation across national origin: The Lebanese, Syrians, and Palestinians have the oldest or most established communities and are least likely to have arrived in the 1990s, while a majority of Iraqi and Moroccan immigrants arrived during the last decade. The home ownership rate among the Lebanese (70 percent) is double that of the Moroccans (35 percent). Similar patterns apply with respect to the Arab-Canadian community: The Lebanese are the oldest community, while Moroccan, Iraqi, and Algerian communities are composed almost entirely of immigrants.

The Arab-American community is on average both richer and better-educated than the US population as a whole. Median Arab-American household income is roughly \$52,000 compared with a national average of \$50,000, with the median Lebanese, Syrian, and Egyptian households earning around \$60,000. In Canada, average and median household incomes are generally a bit lower than the national average, except in the case of Egyptians.

Presumably this earning power is related to educational attainment: The proportion of adult Arab-Americans with a bachelor’s degree (41 percent) was more than half again as large as for the nation as a whole (24 percent). In Canada the share of Arabs with a bachelor’s degree (30 percent) is more than twice the national rate (12 percent). Indeed, in Canada the share of Arab females with a bachelor’s degree (24 percent) is double the national standard—in noticeable contrast to the Arab-European data discussed below.

In the United States there was considerable variation across national origin groups with the Egyptians exhibiting the highest rate of college graduation (64 percent) and the Moroccans the lowest (31 percent)—though even the Moroccans exceed the US national average. These differences are less pronounced in Canada, though again, the Egyptians display the highest rate of educational attainment with more than half holding a bachelor’s degree.

In the United States, Arabs are more likely to be in management or professional work (42 percent) than the national average (34 percent). Again,

the rate is highest for the Egyptians (51 percent) and lowest for the Moroccans (31 percent). In Canada, the shares in management (14 percent) and business or finance (13 percent) are comparable to the national profile, while the percentage employed in natural and applied sciences (11 percent) is more than double the national average.

The US census does not ask respondents about religious affiliation, but anecdotally it would appear that the Arab-American community is also disproportionately Christian, at least relative to the religious makeup of the countries of emigration. The Canadian government does collect religious affiliation data, however. About two-thirds of the Arab-Canadian population is Muslim and about one-third is Christian. The latter make up the majority of the Lebanese, Egyptian, Syrian, and Iraqi communities, while large majorities of the generic “Arab,” Moroccan, and Algerian communities are Muslim.

One gets the impression that the North American Arab community comprises both an older, more settled, perhaps more Christian segment primarily of Lebanese, Syrians, Palestinians, and Egyptians and a younger more recent immigrant community from other regions such as Morocco with Egyptians being disproportionately in professional fields and the Lebanese in business.

Momentarily setting aside reservations about conditions in their countries of origin, is it plausible that this community could drive economic revitalization in the Middle East? It is not obvious that the answer is “yes.” The national origins of the North American Arab community do not mirror that of the region; parts of the community are sufficiently old and established to augur against return; and casual observation and inference drawn from the Canadian data suggest that the community is disproportionately Christian—and these communities are declining in much of the Middle East (Sennott 2002). In short, while these parts of the community may be valuable potential sources of capital, technology transfer, and marketing links, they are unlikely to supply large numbers of returning entrepreneurs.

However, there is a younger, less established component of the community for whom return might be an option under sufficiently attractive conditions. As a first cut, we assume that anyone born in the United States or Canada is sufficiently acculturated that “return” to the Middle East is not probable. That is to say we limit our analysis to “foreign-born” North American Arabs. (We do not exclude citizens of the United States or Canada per se, however: Possession of a foreign passport reduces the irreversibility of the decision to return and as a consequence could actually facilitate repatriation.) We further exclude anyone from a major oil producer on the theory that they are unlikely to engage in the sort of industrial-sector entrepreneurship in which we are most interested. This leaves 445,000 adult Middle Easterners of whom 165,000 are Lebanese and 123,000 are Egyptians.

Of these 445,000 foreign-born adults, roughly 60,000 have graduate degrees, with Egyptians (40 percent) and Lebanese (30 percent) accounting for approximately two-thirds of the total. Roughly 120,000 are in management or professional jobs, with Egyptians and Lebanese again accounting for roughly two-thirds of such employment. In the United States, employment in the manufacturing and information technology sectors is 22,200 and 5,700 respectively, with Egyptians and Lebanese accounting for approximately 60 percent in both cases. (Canada does not report comparable sectoral employment data.) Unfortunately the census data do not allow us to cross-tabulate characteristics, so, for example, we cannot say what share of the 22,200 employed have advanced degrees. Nevertheless this discussion suggests that from the standpoint of targeting potential returnees, the numbers are relatively small and are concentrated on two countries, Lebanon and Egypt.¹³ It is also likely given historic intracompany conflict that a disproportionate share of both the Lebanese and Egyptians are Christians though data on these affiliations are unavailable.

Of the more normally endowed Arab countries, Egypt typically scores badly on institutional and process indicators such as those in tables 9.1 to 9.3 and those reviewed in chapters 4, 5, and 6. The pessimistic interpretation is that Egypt chases away a lot of homegrown talent. The more optimistic scenario is that with sufficient reform, perhaps spurred by a “deep integration” agreement with the United States, it might be able to lure some expatriates back.

By point of comparison, Egypt today is less politically repressive than Taiwan or South Korea were in the 1970s, though income relative to the OECD is noticeably lower today in Egypt than it was in the 1970s in the two Asian countries, implying that a returnee to Egypt would be making a greater leap than his or her Taiwanese or Korean counterpart had made a generation earlier and could anticipate slower growth in real income. At the same time improvements in telecommunications have vastly improved access to information, so in some ways the degree of self-imposed isolation from one’s former life would be less decisive than in the case of the Taiwanese or Koreans in the 1970s. This could be both a blessing and a curse: One would feel less removed from life elsewhere, yet this greater awareness could contribute to feelings of regret. Again, as in the case of our earlier gross estimates of the potential pool of local entrepreneurs, the quantitative analysis can establish the putative existence of a pool of entrepreneurs. What the data cannot document at this level of aggregation is personal characteristics and network connections within North America.

13. Although how small is “too small” is an interesting question. Presumably one would not need too many returnees if one were Bill Gates.

Arabs in Europe

The data on Arab-Europeans are less informative. Differing country historical experiences have shaped the development of national legal and administrative frameworks for dealing with immigration; as observed by the International Centre for Migration Policy Development (ICMPD 2003, 12), “Not only do the fundamental concepts of immigrants, migrants, and minorities used in each national context connote considerable differences in definitions and meanings but the poor quality, erratic availability or even absence of data effectively prevents meaningful comparisons of most indicators across countries.” The conditions underlying this observation are unfortunate since due to both numbers and proximity, one might expect the European returnee channel to be a more propitious one.

Appendix table 9A.1 reports estimates of the number of Arab immigrants and their descendants in Europe derived from European government census data. It should be emphasized that for several reasons these figures understate the actual number of European Arabs and should be regarded as a lower bound: Some countries (e.g., the United Kingdom) do not report the relevant data; in many other cases only a single nationality (usually Moroccan) and not all Arabs are identified; in most cases only foreign-born residents are counted and not their children; and all of the figures pertain only to legally documented migrants and their descendants, so illegal immigrants, who are likely to be more important in the European than in the North American context, are not counted. Some attempts to take these considerations into account have yielded much larger estimates of the Arab-European population than can be derived on the basis of official census data alone.

Even on these fragmentary data, the total figure, nearly 5 million, appears to be roughly four times as large as for North America, with Moroccans alone in Western Europe double that of all Arabs in North America. Unfortunately the fragmentary nature of the data prevents the same sort of systematic demographic analysis as for the United States and Canada. Existing data, however, paint a pointillist portrait very different from the generally successful assimilation of the small North American Arab population: While on average Arab-Americans are richer and better educated than the typical American, educational attainment among European Arabs is disproportionately low, and unemployment is unusually high.

In contrast to North American Arabs, 39 percent of whom have a bachelor’s degree or better, the median educational attainment of Moroccans in the Netherlands, both male and female, is primary school; only 1 percent of Moroccan men and 2 percent of Moroccan women in the Netherlands have a college education (Schreimer 2004, table 4). Nor are their children’s rates of educational attainment auspicious: At the high school level, Moroccans in the Netherlands exhibit disproportionately high drop-out rates, though the rate of attendance has been rising over time.

The situation with regard to educational attainment while better elsewhere in Europe is still low: In Denmark more than half of Moroccan immigrant young people drop out of high school; less than 3 percent make it to university. The figures for the more broadly defined “Moroccan descended” category are better, though still sobering: More than one-third drop out of high school, and less than 6 percent make it to university (Documentary and Advisory Center on Racial Discrimination 2004, annex 3, tables 4 and 5). In Italy the failure rate among children of Moroccan descent was 0.7, 19.6, and 24.7 percent at the primary, middle, and high school levels, respectively (Luciak 2004).

In France, home to the largest and most settled Arab population, performance is better but still lags the general population: The rates of university attendance for Moroccans (16.4 percent) and Algerians (8.5 percent) are lower than their shares in high schools (Moroccans, 26.2 percent; and Algerians, 10.6 percent) implying that their rate of matriculation to university is lower than the rest of the population’s (Luciak 2004). These outcomes may in part be related to discriminatory attitudes among the native French: A survey conducted by The Pew Global Attitudes Project (2003) found that a bare majority (51 percent) of French respondents indicated that North African immigrants have a bad influence on the nation.

Once at university, the evidence is mixed: In Denmark the Lebanese exhibit among the highest dropout rates, and among immigrants and foreigners attending university in Finland, Arabs (along with Estonians) have the highest rate of graduation. But the raw numbers in these Nordic countries are small.

In France, which alone accounts for almost half of the European Arabs, among those attending university the female share is noticeably low (35 percent for Moroccans, 42 percent for Algerians). In the case of Germany the difference is even more stark: Only about one of eight Arab students in German universities is a permanent resident of Germany, but of these, the children of parents who never obtained German citizenship, 80 percent of university attendees are male. From the standpoint of gender equity this difference is regrettable, but given that males have a higher propensity to immigrate, they represent a pool of university-educated potential returnees. Two-thirds of these Arab and Arab permanent resident students in German universities study mathematics, engineering, or natural sciences (Will and Rühl 2004, tables 20, 21, and 23), one of the few optimistic results in terms of potential technology transfers.

Outside the classroom, labor-market participation is low, and rates of unemployment are multiples of the national populations as a whole. For example, in 2000–2001, unemployment among Moroccans averaged 10 percent (8 percent for men, 15 percent for women) compared with 3 percent for the Dutch population as a whole (2 percent for men, 4 percent for women). But beyond the rate of unemployment, the Moroccans exhibit very low rates of labor participation with almost two-thirds of Moroccan

adults classified as “inactive” (Houtzager and Rodrigues 2002, tables 4 and 6). Mohammed Bouyeri, who killed Dutch filmmaker Theo van Gogh, reportedly had been living on unemployment compensation for more than two years at the time of the murder.

Similar patterns can be seen in the Finnish data: Rates of unemployment are multiples of the rest of the population, and there is marked disparity between male and female performance. Statistics from the Ministry of Labor indicate that in 2000 more than three-quarters of Iraqis and more than half of Moroccans were unemployed in comparison to one-third of foreigners as a group and one-eighth of the population as a whole. For the Moroccans in particular the average masks very different rates of employment among men and women. For their part, the Arabs report considerable discrimination in employment practices (Finnish League for Human Rights 2002, tables 2 and 4).

Across Europe, those who were recruited during the period of high demand for unskilled labor in the 1970s tend to have “the lowest level of education and are predominantly employed in occupations requiring only low qualifications” and tend to be overrepresented in service-sector jobs such as cleaning and restaurant work (ICMPD 2003, 41). This pattern is not universal: In the Netherlands, Moroccans have a noticeable presence in blue-collar manufacturing jobs. Potential returnees from this community have undoubtedly acquired transferable skills on the job that under the right circumstances could prove valuable in developing or staffing manufacturing establishments linked to global supply networks. However, this group is aging and is unlikely to be the source of entrepreneurial talent that could break into these networks. The issue is whether it is plausible for the relatively limited numbers of technically trained university graduates to do so.

The European Muslims have significantly more positive views of Westerners and the West than their coreligionists (The Pew Global Attitudes Project 2006a). The French Arabs come mostly from Algeria and Morocco. Today those countries have better democracy scores than Taiwan or South Korea did in 1973 or 1980, the years that the Institute for Technological Research and Innovation (ITRI) and the Hsinchu Science Park, respectively, were established. Admittedly there is more to life than Polity IV ratings, but at least on this indicator of democracy, the degree of local political repression would not appear to be an insurmountable barrier to attracting returnees.

How about income? The data in table 2.6 indicate that between 1970 and 1980, per capita incomes in Taiwan and South Korea were 22 to 37 percent of the OECD average in terms of purchasing power parity. In comparison, the 2000 figures for Algeria and Morocco are 20 and 15 percent, respectively. So an Algerian or Moroccan returning home today would be returning to a society that in relative terms was about as poor as or poorer than what Taiwanese or Korean returnees faced a generation ago when there was in fact little return migration, this phenomenon beginning in the 1980s

when both nations had further closed the relative income gap and afforded opportunities in higher-technology sectors.¹⁴ Parenthetically, among the non-oil based Arab economies, Tunisia stands out with an income level 28 percent of the OECD average—almost precisely the mid-point defined by the Taiwanese and South Korean data from the 1970s, indicating that it is approaching the relative income position that the Asians had attained when they began attracting large numbers of returnees.

A final, and critical, issue is public policy. Taiwan actively recruited returnees. Would Algeria or Morocco (or any of the Arab countries for that matter) welcome an influx of educated risk takers? The role for returnees as a link between the local economies of the Middle East and developed economies may be limited. The number of potential returnees is large; the issue relative to the examples of other countries such as India or Korea is the extent of high-level industrial experience—the Taiwanese were able to recruit émigrés who had jobs at major high-technology firms, and Indians who contributed to the rise of that country’s software industry may not have returned but helped from California. The above calculations establish a large potential reservoir of unknown capability.

Potential Role of Reverse Migration

The potential channels of human capital technology transfer would appear to be the greatest between North America and the Eastern Mediterranean on the one hand and Western Europe and the Maghreb on the other. But for this transfer to be effective, the countries of return will have to make themselves more attractive destinations, including by improving security of property rights and social stability. The brain drain will not be reversed unless returnees are confident that they will not be subject to economic predation and that their families will be safe. It may also be necessary to develop specific policy supports to lure back entrepreneurs, as was done in the case of Taiwan. Generic improvements in the protection of property rights and physical stability would also make the local environment more attractive to foreign counterparts and investors more broadly.

The benefits of externally provided skills may be understood in terms of the Nelson-Phelps framework used in chapter 6. These skills provide the education base that can fruitfully absorb foreign technology inflows whether of equipment or production and marketing knowledge, thus substituting for absent local competence. But such imported skills cannot fill all local gaps—a literate-numerate labor force must be present (see Noland and Pack [2003] on the skills present in Japan, South Korea, and Taiwan in the 1950s), and public infrastructure ranging from roads, ports,

14. Between 1971 and 1993, the rate of return of Taiwanese students ranged between 16 and 22 percent. The rate of return for Koreans with science or engineering PhDs was less than 10 percent (Smith 2000).

and telecommunications needs to be present, though as the Indian case demonstrates, the private sector can provide some of it.

Given the limited extent of existing manufacturing activity in the Middle East, and the absence of local equivalents to the Indian Institutes of Technology, it is possible that the spurt of labor-intensive exports necessary for employment growth would not materialize, even if accompanied by additional reform. China, the earlier Asian exporters, and now increasingly India have established positions in major product lines. Free trade agreements might provide preferential access to the European and US markets but are unlikely to completely offset existing cost differentials relative to incumbent Asian producers. Outsourcing of white-collar jobs from Francophone Europe is a possibility for the Maghreb, but none of the Arab countries can compete with India, the Philippines, or even China in terms of the number of well-educated English speakers.

It might be tempting for governments to introduce industrial policy—picking niche sector winners—but evidence on the success of such programs is not encouraging (Noland and Pack 2003), and earlier attempts to do precisely this, especially in Egypt, were demonstrated failures (Hansen and Marzouk 1965). While Egypt, a fairly large country, could follow a domestically oriented strategy that did not rely on exports, it would probably entail slower growth than is required to absorb the rapidly growing labor force. To expand rapidly based largely on domestic skills will take considerable time—mastery of production technology and marketing are slow processes. Thus some utilization of foreign skills whether through FDI, joint ventures, consultants, or intensive technology licensing will be necessary for rapid growth. Although a template exists from East Asia, its implementation in the Arab economies may face significant social and political obstacles, an issue discussed below.

Role of Foreign Investment

Direct investment is the fastest-growing segment of cross-border capital flows. Although the theoretical impact of foreign investment on economic performance is ambiguous, most research suggests that it is positively correlated with growth, at least conditional on education, financial-market development, and trade policy openness, though the causality relationships among these variables are subject to dispute (Gao 2005).¹⁵ As ob-

15. Recent empirical work suggests that FDI inflows are growth-promoting conditional on outward orientation (Balasubramanyam, Salisu, and Sapsford 1996), education (Borensztein, De Gregorio, and Lee 1999), and financial-sector development (Alfaro et al. 2003). The impact of FDI in the presence of a distorted trade regime is more controversial, however. It is theoretically possible that capital inflows that are FDI induced into a protected capital-intensive import-competing sector could actually be immiserating (Bhagwati and Srinivasan 1983), though the likelihood of this extreme result is subject to dispute.

served in chapter 4, traditionally Arab countries have attracted relatively little foreign direct investment (FDI), especially outside the extractive sector (table 4.9). In recent years there has been a surge in FDI, but it is unclear how much of that is a product of a possibly unsustainable rise in oil prices and in some countries one-off privatizations that can temporarily boost the FDI figures. Most analyses conclude that the Middle East and North Africa (MENA) has “underperformed” with respect to attracting FDI (Nugent 2001, Nugent and De Alencar Loiola 2003, World Bank 2003a). Likewise, portfolio investment has been low (table 4.12), though recently it has surged, driven by rising oil prices, attempts to improve the quality of local financial markets, and a post-September 11 increase in regional home-bias.

There are a variety of reasons why the region has attracted little inward investment, just as there are multiple motives on the part of investors. In the case of the oil exporters, natural resource-derived rents have provided plenty of investable capital, and nationalization of the oil sector has meant little opportunity for foreign investment in the economy’s dominant sector. Foreign firms play important roles in this sector, though generally not as investors.

For the nonoil economies where the likely sectors of investment have been manufacturing or services, local conditions have not been particularly propitious. One can think of direct investment occurring both “horizontally” across countries, as multinational firms reproduce similar activities across countries with similar incomes and endowments, and “vertically” across countries of differing incomes and endowments as these firms disaggregate the production process and geographically site activities to minimize costs.¹⁶ David L. Carr, James R. Markusen, and Keith E. Maskus (2001) produce an elegant synthesis of these approaches, but their model is highly stylized, and its implications are rejected by the data (Blonigen and Wang 2005).

One is left with an empirical literature that for the most part attempts to explain the bilateral volume of FDI flows using gravity-type models in which investment flows are functions of income and transaction costs (often proxied by physical distance—hence the “gravity” moniker), augmented by specific considerations, such as the role of trade barriers (e.g., Park and Lippoldt 2003), taxes (e.g., Park and Lippoldt 2003, Grubert and Mutti 2000, Mutti and Grubert 2004), corruption (e.g., Wei 2000), intellectual property rights protection (e.g., Park and Lippoldt 2003), financial-sector development (e.g., Albuquerque, Loayza, and Servén 2005), market potential (e.g., Carstensen and Toubal 2004, Cieřlik and Ryan 2004), and local population health status (e.g., Alsan, Bloom, and Canning 2004). Moreover, these determinants likely interact—e.g., FDI inflows are positively associated with high incomes together with large host markets (FDI

16. Caves (1996) contains a survey of this literature.

to serve the local market—for example Honda in the United States) or low wage rates together with trade openness (think consumer electronics assembly for export in China).

The sheer multiplicity of motivations and models covered by the common rubric of “foreign direct investment” raises deep specification issues; there is no meta-model template, and there will probably never be one. That said some correlates appear to be robust. Corporate tax rates are almost always negatively associated with FDI. Trade openness is generally associated with FDI (with the caveat that the “jumping the tariff wall” effect works in the opposite direction). As alluded to previously, privatizations are generally associated with at least temporarily increased FDI inflows. If one runs through these kinds of considerations—taxes, trade openness, and privatization—plus intellectual property rights protection, corruption, financial-sector development, and local market size, among others, the Arab countries would not be expected to score particularly well or attract large volumes of inward investment.

But the studies that have examined this issue from a MENA perspective generally go further and conclude that inward flows are not only low as might be expected on the basis of the fundamentals but also below the norm. What could explain this differentially substandard performance?

One possible explanation for this relative dearth of inward capital flows is that foreign investors attach a relatively high subjective assessment of risk to investment in the region. Terrorists have a long history of targeting foreign investments, and in a world of mobile capital where investors can choose across alternative locations, terrorist risk can significantly deter FDI inflows (Abadie and Gardeazabal 2005, Lutz and Lutz 2006). Table 9.5 reports percentile ranking of the Arab and comparator countries on the perceived business costs of terrorism. To be clear, these perceptions may not coincide with actual costs or risks, but they do reveal how 7,000 business executives—presumably the class that is making investment decisions over alternative locations—interviewed in the first five months of 2005 viewed the world. And in fact the rating is highly correlated with FDI inflows.¹⁷

From the standpoint of the Middle East, the results are not good. Jordan is the region’s best scoring country, placing it at the global sample median, followed closely by Tunisia (58th percentile). The remaining three Arab countries—Morocco, Algeria, and Egypt—fall into the worst quintile of the distribution. While this intra-MENA ranking might coincide with one’s prior expectations about the relative costs, the scores for the other comparators raise questions about what is being captured in this ranking. The United States scores poorly on this measure; Taiwan, which has mili-

17. The simple correlation coefficient is 0.34 for a sample of 94 countries, significantly different from zero at the 1 percent level.

Table 9.5 Macroeconomic environment: Business costs of terrorism

Country	Percentile rank^a
Middle East	
Algeria	87
Egypt	90
Jordan	50
Morocco	83
Tunisia	58
High-performing comparators	
South Korea	38
Taiwan	57
Large comparators	
China	43
India	68
Normally endowed comparators	
Bangladesh	96
Brazil	2
Pakistan	80
Turkey	72
Resource-rich comparators	
Botswana	40
Indonesia	85
Nigeria	63
Venezuela	77

a. Larger value indicates a higher business cost of terrorism.

Source: World Economic Forum, *Global Competitiveness Report 2004–2005*.

tary tensions with China, but no internal terrorist threat to speak of, lags Jordan and is well behind China, which does occasionally experience terrorist incidents. This may simply be indicative of the difficulty of people with local knowledge to relate their circumstances to a broader set of comparators beyond their immediate region. Nevertheless, at a minimum the results underscore that some Arab countries are perceived to be highly risky or costly places in which to do business.

The economic impact of such perceptions does not appear trivial, even if the precise implications are uncertain or speculative. As an illustration, according to a regression model of FDI, if Egypt, Algeria, and Morocco were to achieve the plausible goal of reducing the perceived business cost of terrorism in their economies to the level achieved in Tunisia or Jordan, the best among the regional countries surveyed, and roughly at the median of the global rankings, the projected increases in FDI inflows would

be 31, 25, and 17 percent, respectively.¹⁸ Conversely, Alberto Abadie and Javier Gardeazabal (2005) estimate that a one standard deviation increase in the terrorist risk induces a fall in the net FDI position of roughly 5 percent of GDP.

Moreover, economic risks are not limited to terrorism. The responses revealed in the 2002 Pew Global Attitudes Project discussed in chapter 7 revealed a considerable degree of cross-country variation in attitudes toward globalization in both its economic and noneconomic dimensions, with the citizenries of the Arab countries surveyed evincing decidedly ambivalent attitudes toward globalization and the expansion of cross-border economic exchange. These attitudes in turn potentially raise red flags about the reception that foreign investors are likely to receive from government officials, their employees, suppliers, and customers. From the standpoint of public policy the risks include direct as well as indirect expropriation through the ex post imposition of policies such as new labor regulations, corporate taxes, or restrictions on the repatriation of capital. Popular attitudes may also signal the degree of security risk—the possibility that local staff or facilities could be subject to harassment or attack.

These observations coincide with a growing body of evidence that suggests that international exchange may be less frictionless and such concerns may play a bigger role in determining outcomes than economists might have once believed. Noland (2005b) integrates the previously discussed Pew survey data into a series of economic models that explain FDI, where the investor is foreign and has a physical presence; sovereign bond ratings and spreads, where the investor is foreign but has no physical presence in which local public opinion may constrain official policy; and local entrepreneurs, who have a physical presence but are indigenous. The results indicate that the cross-national responses to a number of Pew survey questions correlate with economic variables of interest and appear to convey information about risk beyond what can be explained by fundamentals such as corporate taxes or trade openness and, by extension, outcomes.

The general pattern that emerges—stronger correlation between the Pew survey responses and FDI that involves the physical presence of a for-

18. The following results were obtained for a regression of the FDI inflow share of GDP 1997–2002 on the corporate tax rate, the Transparency International indicator of the absence of corruption, a privatization indicator, OECD membership, and the business cost of terrorism score, all in logs:

$$\begin{aligned}
 \text{FDI} = & 2.4 - 0.55\text{OECD} - 1.30\text{TAX} + 0.73\text{NOCORRUPTION} + 0.56\text{PRIVATIZATION} \\
 & (0.92) \quad (-1.77)^c \quad (-2.21)^b \quad (2.72)^a \quad (1.68)^c \\
 & + 1.14\text{TERRORISM} \\
 & (1.70)^c
 \end{aligned}$$

$n = 47$, $R^2 = 0.43$. T-statistics are in parentheses. The designation “a” indicates a coefficient significantly different from zero at the 1 percent level; “b” at the 5 percent level; and “c” at the 10 percent level.

eign entity as distinct from purely financial transactions or the presence of indigenous entrepreneurs—suggests that the pattern of cross-national responses may contain information about subjective assessments of security risk. Foreign direct investors may be particularly sensitive to antiglobalization sentiment inasmuch as they are subject to both political risk at the policy level and, to a much greater extent than portfolio investors, direct security risk to themselves, their employees, and their facilities.¹⁹ Further, the Pew responses that are more highly correlated with cross-border economic outcomes tend to be ones relating to basic notions of tolerance and absence of chauvinism and xenophobia than to attitudes toward the more narrowly economic manifestations of globalization per se. The unsurprising exception to this pattern regards the prevalence of local entrepreneurship where it is fundamental attitudes toward markets, not globalization, that matter—and where the pattern of Arab responses relative to those obtained in other regions do not appear distinctive.

To get a sense of how quantitatively significant the public attitude variables are, the following calculation was performed. The exclusively OECD-member North America and Western Europe regions were excluded, and a “best practice” standard was formed by averaging the highest Pew survey score from each of the remaining predominantly non-OECD member regions. So, for example, for the “international economic organizations are good” question, this “non-OECD best practice” score is 75 (the simple average of Guatemala, 73; Slovakia, 74; Côte d’Ivoire, 87; Vietnam, 85; Uzbekistan, 85; and Jordan, 44). The estimated coefficients were then used to calculate the increase in FDI that would be associated with an increase in a country’s actual score to the best practice score. Egypt, Jordan, and Lebanon were the only Arab countries covered in the Pew report, and even in these cases, missing data sometimes make calculating these kinds of counterfactuals impossible. Nevertheless, in cases where it is possible to perform such counterfactual calculations, the potential increases appear significant, implying a near doubling of FDI inflows in the cases of Jordan and Lebanon.²⁰

These results suggest one impediment to cross-border integration, namely the role that popular attitudes may play in generating subjective assessments of risk. These attitudes toward globalization are most important with respect to FDI in which the investor is both foreign and physically present and relatively less important with respect to portfolio investment where there is no physical presence or entrepreneurship by in-

19. In contrast, Jonathan Eaton and Mark Gersovitz (1984) argue that foreign direct investors may actually be less subject to expropriation than portfolio investors since FDI often is associated with an intangible asset that is difficult to expropriate.

20. These effects are not limited to FDI. Noland (2005b) reports a similar analysis of sovereign ratings, another measure of risk, in this case the risk of default on a financial obligation. For Jordan and Lebanon, attainment of the non-OECD “best practice” would be associated with a single step-change upgrade implying a 65 basis point improvement in sovereign borrowing costs.

digenous residents. Moreover, among the Pew responses, those relating to general notions of tolerance, lack of chauvinism, and xenophobia are significant more frequently than those relating to more narrowly economic manifestations of globalization per se, and the magnitudes of the estimated coefficients are large in the sense that changes in public attitudes of plausible magnitudes imply economically meaningful changes in FDI and sovereign debt ratings. For many countries, reducing terrorism risks and/or transforming public perceptions toward globalization could improve significantly the terms on which globalization occurs.

Affinity, Democracy, and Risk

The discussion thus far has proceeded from the standpoint of the potential of local attitudes to constrain the pace, depth, and modality of cross-border economic integration. Of course it takes two to tango, and while social opposition to integration may exist on the recipient side, the same sorts of issues may exist symmetrically on the sender side as well.

Again, we cannot observe these risk assessments directly, but recent research on trade flows provides some intriguing clues that presumably apply to other forms of economic exchange as well, including investment. There is evidence that terrorism, which disproportionately afflicts the Middle East, inhibits trade (Barth et al. 2006, Blomberg and Hess 2006). There is also some evidence that the degree of cross-national trust or affinity may have a significant impact on the volume of trade.²¹

Since 1978, the Chicago Council on Foreign Relations (CCFR) has sponsored quadrennial surveys of US public attitudes on foreign policy issues.²² One aspect of these polls has been to survey American public opinion by asking respondents to rate their feelings toward other countries on a scale of 0 to 100, with higher figures indicating greater affinity. Table 9.6 reports the rankings from the initial survey in 1978 and the most recent survey conducted in 2002. The results are not enormously surprising: Canada and the United Kingdom, countries with which the United States has long historical and cultural ties, are at the top of the table in both the initial and terminal years of the sample. Some countries exhibit significant

21. Luigi Guiso, Paola Sapienza, and Luigi Zingales (2004) argue that cultural distance or trust is a robust explanatory variable of the volume of international trade in goods in the context of a conventional gravity model, with a one standard deviation increase in trust of the importer toward the exporter increasing exports by 32 percent. Similarly, Noland (2005b) finds that a one standard deviation increase in affinity, proxied by the Chicago Council on Foreign Relations “temperature” score, is associated with a 20 to 31 percent larger volume of bilateral trade between the United States and its trade partners when evaluating the sample means. Richard Portes and Helene Rey (2005) extend this kind of analysis to portfolio flows.

22. See Chicago Council on Foreign Relations (2004) for a description of the survey methodology.

**Table 9.6 Chicago Council on Foreign Relations
“temperature data,” 1978 and 2002**

Country	1978	Country	2002
Canada	72	Canada	77
Great Britain	67	Great Britain	76
France	62	Italy	65
Israel	61	Germany	61
Mexico	58	Japan	60
Germany (West)	57	Mexico	60
Italy	56	Brazil	55
Japan	56	France	55
Brazil	52	Israel	55
Taiwan	51	Russia	55
Iran	50	Poland	50
Poland	50	South Africa	50
India	49	Taiwan	50
Saudi Arabia	48	China	48
South Korea	48	Argentina	47
South Africa	46	India	46
China	44	South Korea	46
Russia (Soviet Union)	34	Egypt	45
Cuba	32	Turkey	45
Afghanistan	n.a.	Nigeria	42
Argentina	n.a.	Colombia	36
Colombia	n.a.	Cuba	35
Egypt	n.a.	North Korea	34
Iraq	n.a.	Saudi Arabia	33
Nigeria	n.a.	Pakistan	31
North Korea	n.a.	Afghanistan	29
Pakistan	n.a.	Iran	28
Turkey	n.a.	Iraq	23

n.a. = not available

Note: Higher figure indicates greater affinity of US public toward country.

Sources: Chicago Council on Foreign Relations, WorldViews 2002, Topline Data from US Public Survey.

changes in “temperature” (CCFR’s term) over the sample period, however. Iran, for example, falls 22 points, and the Soviet Union/Russia rises 21, presumably reflecting the major political changes within these two entities and in their diplomatic relations with the United States during the sample period.

Saudi Arabia was the only Arab country included in the initial survey in 1978; between 1978 and 1998 its temperature fluctuated in the intermediate range of 46–53, before falling dramatically to 33 in 2002, actually scoring lower than North Korea and Cuba. The precipitous decline in

public esteem was presumably driven by the identification of Saudi Arabia with the September 11 terrorist attacks, in which a majority of the hijackers were Saudis. Iraq was added to the sample in 1990 and was the least liked country in that and each subsequent poll, with a temperature ranging from 20 to 25. If nothing else, this suggests that American antipathy toward Iraq, or more probably the political regime of Saddam Hussein, did not begin with the George W. Bush administration. Egypt was added to the most recent poll sample and scored 45, putting it in the same league of American affection as Turkey, India, and South Korea.²³

Affinity between the United States and other countries is determined, in turn, by observable cultural and ideological markers: specifically, the extent of ethnic and religious similarity in the counterpart population, the degree of partner country democracy, and whether the other country has a Communist government, with the last being the most robust correlate with affinity or in this case the lack thereof. Americans mildly prefer countries that have populations ethnically and religiously like themselves, but they like other democracies, and they really dislike Communists (Noland 2005c). For Americans, it appears that ideology trumps race.

American anti-Communism is not an issue for the Middle East, but the lack of democracy harkens back to the observation in chapter 1, that as a region, the Middle East is the least democratic in the world (figure 1.4). And while it is difficult to alter ethnic or religious affinity through public policy, the link between trade and democracy, and the presumably easier time that a more democratic government would have concluding a preferential trade arrangement with the United States, hold out at least the possibility of a virtuous circle in which political liberalization would be reinforced by prosperity through successful globalization.

Conclusion

A major question facing the Arab countries is whether even if they reform their economic policies an adequate entrepreneurial response will be forthcoming from local firms, native born who have emigrated, or foreign in-

23. Comparable data on European attitudes does not appear to exist, but if the previously cited data on attitudes toward immigrants from different sender countries is interpreted as a proxy for more general attitudes toward the sender countries, it is unlikely that European attitudes toward Middle Eastern countries are markedly better than those reported here. At least one bit of evidence would appear to suggest that affinity between Europeans and Arabs is not particularly high: When asked their reaction to the prospect of increased immigration by various nationalities, Arabs came in next to last (beating out Somalis), with less than 40 percent of Finns receptive. Moroccans were distinguished as a separate group and fared somewhat better than Arabs, while still less than 40 percent were welcoming, but Moroccans were preferred to Russians, Kurds, and Turks (in addition to Arabs and Somalis) (Finnish League of Human Rights 2002, figure 2).

vestors. Under current conditions, for differing reasons in each case, it is not obvious that any one of the three groups—local firms and entrepreneurs, returnees, and foreign firms and investors—will exhibit a strong, positive response to policy. The main constraint on local entrepreneurs in the manufacturing sector would appear to be a lack of technical capacity, though admittedly a negative statement is difficult to prove, and we would welcome being proved wrong.

With respect to returnees, the problem is twofold, relating both to the sender communities and the host countries of return. The sender communities of the Arab diaspora are located primarily in Western Europe and secondarily in North America. The North American community appears to have the requisite skills but is strongly oriented toward two countries, Egypt and Lebanon, and for reasons of age and possibly religious affiliation, it is questionable whether this community could be a source of large numbers of returnee entrepreneurs. A younger, less settled segment of the North American community might ultimately have a larger impact.

The size of the Arab community in Europe is at least four times as large as in the United States, and has the further advantage of geographical proximity. However, unlike the highly accomplished Arab-American community, the issue with this community is whether it has the necessary skills to play a synaptic role between its countries of origin, primarily Morocco, and the global community.

The last issue is with respect to the countries of return. Obviously the effective utilization of returnees is predicated on addressing the underlying microeconomic impediments to economic activity. Conditional on these being addressed, returnees could be a source of revitalization. The example of Taiwan suggests that Jeffersonian democracy is not a necessary condition for luring expatriate talent home. Political stability, protection of property rights, physical safety, and a supportive policy environment probably are.

The same sorts of considerations enter into the decision making of the third source of supply response, foreign firms and investors. Faced with a variety of locations to choose from, the apparent ambivalence prevalent across the Middle East with respect to cross-border economic integration and globalization more broadly appears to raise the subjective assessment of risk that foreigners attach to economic interaction with the Arab economies. We have shown that in some cases reductions in risk might lead to increases in FDI of 30 percent or more. Political liberalization and a more secure and predictable domestic policy environment could contribute directly and indirectly to increased trade as well. Admittedly much of this evidence is more fragmentary, indirect, and circumstantial than we would like. That said, it all points in the same direction: Risk significantly reduces the volume and implicitly the terms on which cross-border economic exchange occurs. Reducing this risk premium would contribute to regional prosperity.

Political liberalization could contribute to such an outcome. However, while there are rising demands within the region for political liberalization, and indeed considerable ferment within some countries of late, it is not clear that these demands for greater internal political openness encompass economic reform or embody greater receptivity to foreign influences on a variety of dimensions.

The problem for any incumbent government is the lack of obvious policy instruments to address these underlying popular concerns on the one hand and reduce the perceived risk of the local business environment on the other. Public campaigns to stress the opportunities presented by globalization could be aimed at the former, while receptivity to the latter could be signaled by participating in preferential trade agreements as discussed in the previous chapter. Needless to say, neither are panaceas. And while in the long run democratization may reduce the likelihood of instability and indeed contribute to a virtuous circle of reform and prosperity, piloting the transition is not simple, particularly in societies in which political opposition is increasingly expressed in religious terms. We turn to this issue in the next chapter.

Appendix 9A

Table 9A.1 Lower-bound estimates of Arabs in Europe (thousands)

Country	Year ^a	Number of Arabs
Austria	2001	8
Naturalized citizens from:		
Egypt		5
Iraq		2
Tunisia		1
Belgium ^b	2000	96
Denmark	2002	56
Morocco		8
Iraq		22
Jordan		2
Lebanon		21
Syria		3
France ^c	1999	3,380
Foreign citizens, immigrants, and foreigners by origin from:		
Algeria		1,776
Morocco		1,604
Germany	2001	198
Immigrants from:		
Morocco		79
Lebanon		49
Tunisia		24
Naturalized citizens from:		
Morocco		30
Lebanon		16
Italy ^b	2001	197
Netherlands	2002	340
Immigrants from:		
Morocco		159
Iraq		41
Egypt		16
Foreign-born parent:		
Morocco		124
Spain ^b	2001	247
Sweden (foreign-born, Iraq)	2003	63
Implied total		4,585

a. Latest year for which data are available.

b. Implied total based on data in ICMPD (2003, tables A1 and A2).

c. Percentages of Algerian and Moroccan immigrants are applied to foreign citizen and foreigner by origin totals to estimate the number of Arab immigrants in France.

Notes: Countries reported in this table use different protocols for counting immigrants, so the format differs from country to country. Subtotals may not add up due to rounding error.

Sources: Austria: Ludwig Boltzman Institute (2003, table 9); Denmark: Documentary and Advisory Center on Racial Discrimination (2004, annex 3, table 1); Germany: Hönekopp, Will, and Rühl (2002, table 9) and Will and Rühl (2004, table 33); The Netherlands: Schreimer (2004, table 1); Sweden: Mulinari (2004, table 13).