5

Economic Impact

A central presumption behind the US–Middle East free trade agreement (MEFTA) initiative is that the trade and investment links between the United States and the Middle East could be expanded and that such an expansion would have a substantial economic impact. Table 5.1 reports recent data for exports and imports of members of the Arab League with the United States. A striking feature of the data is that current trade links with the United States are relatively small. For many countries in the region, the European Union is the far more significant trading partner. In 2003, for example, EU imports and exports from Arab countries were 4.6 and 3.7 times larger than those from the United States, respectively. Several Mediterranean Arab countries (Tunisia, Algeria, Morocco, and Syria) send more than half their exports to the European Union, and Egypt sends about a third. (The EU role in exports from the Gulf is much smaller, with a share of less than 10 percent.) The European Union is also very important as a source of imports, accounting on average for 37 percent of all imports, ranging from 70 percent from Tunisia to 16 percent from Syria.

US Market

In 2003 the United States was a significant market—defined as accounting for more than 10 percent of exports—only for Jordan (26.2 percent), Algeria (23.6 percent), and Saudi Arabia (19.3 percent). Moreover, Algeria and Saudi Arabia overwhelmingly export oil, which could find an alternative market relatively easily. Overall, for the countries reported in table 5.1, the United States accounts for just 11.4 percent of exports. Moreover, exports of oil and natural gas to the United States accounted for 46 percent of all exports to that country. Thus, nonoil exports to the United States amount

Table 5.1 Distribution of trade of Arab countries (percent)

Country	Year	Exports (millions of US dollars)	Imports (millions of US dollars)	Exports to United States	Exports to European Union	Exports to Arab League	Imports from United States	Imports from European Union	Imports from Arab League
Algeria	2004	32,083	18,308	24	54	3	6	55	4
Bahrain	2004	7,516	6,584	3	2	11	3	18	10
Egypt	2003	6,161	10,893	8	34	17	12	28	9
Jordan	2004	3,891	8,144	26	3	41	7	24	31
Kuwait	2001	16,164	7,869	11	8	3	11	33	14
Lebanon	2003	1,524	7,167	4	11	42	6	44	13
Libya	2004	0	6,318				2	47	6
Morocco	2004	9,750	17,641	4	74	3	4	56	9
Oman	2004	14,061	8,618	1	3	11	5	26	36
Qatar	2004	18,685	6,005	1	3	6	10	46	20
Saudi Arabia	2001	73,403	36,965	19	13	4	15	28	6
Syria	2004	5,383	7,049	3	54	30	4	16	17
Tunisia	2004	9,685	12,734	1	83	9	3	70	7
United Arab Emirates	2001	32,669	30,544	2	3	11	8	33	6
Yemen	2004	4,051	3,734	1	1	7	5	19	37
Total		235,025	188,572	12	22	7	6	30	9

Table 5.2 Tariffs Arab countries pay on exports to the United States

	US tariff rate (percent)		Exports to the United States (billions of dollars)	
Country	**2003**	**2004**	**2003**	**2004**
Algeria	0.15	0.12	4.43	6.89
Bahrain	7.94	7.13	0.38	0.41
Egypt	6.68	6.06	1.13	1.33
Iraq	0.22	0.13	3.76	8.05
Jordan	0.44	0.37	0.67	1.09
Kuwait	0.48	0.29	2.13	3.21
Lebanon	0.95	1.12	0.09	0.07
Libya	—	0.18	0.00	0.31
Morocco	3.68	2.66	0.40	0.55
Oman	3.74	4.86	0.61	0.42
Qatar	4.82	3.08	0.33	0.36
Saudi Arabia	0.37	0.28	17.11	20.43
Syria	2.51	1.76	0.24	0.24
Tunisia	6.47	4.01	0.10	0.21
United Arab Emirates	4.37	4.09	1.13	1.12
Yemen	0.05	0.08	0.09	0.04
Total	0.96	0.68	32.61	44.74

Source: US International Trade Commission, www.usitc.gov.

to around 6 percent of all exports from Arab countries. Neither do Arab countries loom large as US trading partners. The $32.6 billion these countries exported to the United States equaled just 1.8 percent of US merchandise imports in 2003.

As reported in table 5.2, the tariffs paid on exports to the United States by several of the countries are extremely low—particularly those on oil exports. In 2003 the United States collected $178 million on its imports, of which Saudi Arabia accounted for $62.7 million, Egypt for $75 million, and the United Arab Emirates for $49.5 million. Ten countries paid average rates of less than 2 percent. In part this is because the United States generally has low tariffs and in part it is because Arab countries are not very competitive in the products in which US tariffs remain fairly high. The highest duties were levied on products from Bahrain (7.1 percent), Egypt (6.1 percent), Oman (4.9 percent), United Arab Emirates (4.1 percent), Tunisia (4 percent), and Qatar (3.1 percent). Overall, the average tariff rate was just 0.68 percent.

Arab Markets and Barriers

The role of US imports for Arab markets is even smaller. The United States accounts for more than 10 percent of imports in Saudi Arabia (15 percent),

Table 5.3 Arab tariffs on US exports, 2003

Country	Tariffs[a] (percent)	Imports from United States (billions of dollars)
Algeria	9.62	0.71
Bahrain	21.29	0.19
Egypt	16.90	2.66
Iraq	n.a.	0.32
Jordan	9.43	0.36
Kuwait	3.88	1.50
Lebanon	3.61	0.43
Libya	8.75	0
Morocco	18.97	0.58
Oman	8.28	0.41
Qatar	3.91	0.41
Saudi Arabia	9.16	4.60
Syria	13.69	0.26
Tunisia	15.45	0.27
United Arab Emirates	3.73	3.51
Yemen	9.18	0.20
Total (excluding Iraq)	9.16	16.07

n.a. = not available

a. Tariffs on top 10 imports from United States weighted by 2003 US import values.

Sources: US International Trade Commission; UN Comtrade Database; UNCTAD/WHO TradeMap (www.trademap.org) and Market Access Map (MacMaps).

Egypt, (12 percent), Kuwait, (11 percent), and Qatar (10 percent), But for the group overall, the United States accounts for just 8.4 percent of all imports. US exports to these countries in 2003 amounted to $16.4 billion, or less than 2 percent of overall US exports.

US exports face substantial tariff barriers in some Arab countries, and relatively low barriers in others. Table 5.3 reports a weighted average of applied most favored nation (MFN) tariffs on the top 10 US exports to each Arab country by value. (This sample allows for capturing about 80 percent of all US exports.)[1]

The countries fall into three categories. Barriers were relatively low (between 3 and 4 percent) on US exports to Lebanon and three Gulf Cooperation Council (GCC) countries (United Arab Emirates, Kuwait, and Qatar) that had flat tariff regimes with almost all MFN applied rates at 4 percent. (These have more recently been raised to 5 percent.)

1. In Saudi Arabia, different rates are applied within individual product codes, so the rates used in the majority of lines were selected.

An intermediate group has applied tariffs that average around 10 percent. This group includes Oman, with an average rate of 8.3 percent, Saudi Arabia (9.2 percent), Yemen (9.6 percent), Algeria (9.6 percent), and Jordan (9.4 percent, without the FTA for Jordan.).[2] A third group had much higher barriers: Syria (13.7 percent), Tunisia, (15.5 percent), Egypt (16.9 percent), Morocco (19 percent), and Bahrain (21 percent).[3]

It is noteworthy that although they are a customs union, the GCC countries actually have quite different external tariffs vis-à-vis the United States. The United Arab Emirates, Kuwait, and Qatar have similar low rates, while Saudi Arabia, Bahrain, and Oman are different from each other, with significant protection. However, tobacco trade has an important influence on these data. In six countries, tobacco and cigarettes, which have very high levels of protection, fall among the top 10 US exports. Duty rates of 100 percent are charged on tobacco in Bahrain, Oman, and Saudi Arabia, countries with significant imports of tobacco from the United States. If tobacco is excluded, weighted average applied rates on US products in Saudi Arabia and Oman decline to 5.6 and 5.7 percent, respectively. The result makes the GCC tariff levels appear much more alike (five of the six countries have rates falling between 5.7 and 4 percent) and Jordan appears to be a more open economy, as its rate falls to 5 percent.

This suggests that, from a US perspective, there are two groups of countries. One set with fairly low average tariffs (Lebanon, the five GCC countries, and Jordan), and the rest with applied tariffs at much more substantial levels (Morocco, Egypt, Tunisia, Syria, Algeria, Yemen, and Libya).

Impact of Free Trade

A first cut at estimating the impact of an FTA between the United States and the group of Arab countries as a whole is to apply a partial equilibrium framework. Under the assumption that the supply of US exports is perfectly elastic, i.e., that additional US exports can be provided without

2. Oman has 100 percent protection for tobacco, 14 percent for electrical machinery, and around 5 percent for most other types of equipment. Saudi Arabia has 100 percent tariffs on tobacco products and 20 percent on plastics products, but most US exports to Saudi Arabia are machinery products subject to rates of around 5 percent. Algeria has tariffs on industrial products of around 15 percent, but low tariffs on imported cereals, which account for 26 percent of US exports. Jordan levies a 76 percent tariff on tobacco, 15 percent on instruments and vehicles, 10 percent on machinery, and low rates in cereal.

3. Syria is open to imports of cereals, with a 2 percent rate, has very tariffs on vehicles (76 percent), and rates of 30 percent on tobacco, around 15 percent on aircraft, fibers, paper, and plastics, and 11 percent on electrical machinery. Since 2003, Egyptian tariffs have been significantly reduced. Vehicles have a 50 percent rate, electrical machinery 10 percent, machinery 8.7 percent, and cereals 4.6 percent. Morocco has high tariffs on cereals (70 percent), tobacco (25 percent), stone (23 percent), and instruments (19 percent).

raising prices, the key parameter is domestic demand elasticity.[4] It is reasonable to assume this parameter lies somewhere between 1 and 3. This suggests that eliminating the average tariff of 9.16 percent on US exports to the region in 2003 would lead to increased US exports of between 8.4 and 25.2 percent.[5] Given US exports to the Arab countries valued at $16 billion in 2003, the elimination of tariffs would result in increased US exports by between $1.35 billion and $4.05 billion. This increase would be equal to between .19 and .57 of 1 percent of overall US exports in 2003 of $712 billion and between 0.7 and 2.1 percent of Arab imports reported in table 5.1. These numbers are not only relatively small but also for the most part would replace imports from other partners rather than domestic producers. Overall, therefore, the effects would be quite modest.

This approach suggests even smaller effects on Arab exports to the United States. Assuming infinite supply elasticities and demand elasticities of between 1 and 3 suggests that as a group these countries could expect their exports to the United States to rise by between 0.68 and 2.04 percent. Using the 2003 exports to the United States as a benchmark, this suggests additional exports of between $221 million and $663 million. Again, these numbers simply pale in comparison to US merchandise imports of $1.282 trillion in 2003 and Arab exports of $235 billion in 2004. Clearly, these magnitudes are so small that, even assuming higher but plausible demand elasticities, this type of analysis will indicate very small effects.

Indeed, these are precisely the conclusions that have been reached by the US International Trade Commission (USITC) when it has studied prospective US FTAs with Middle Eastern economies (USITC 2000, 2004a, 2004b, 2006). In the case of Jordan, for example, the USITC (2000, ii) concluded there would be "no measurable impacts on total US exports, total US imports, employment or production." The study did project some growth in bilateral trade: an increase in US exports of cereals by 14 percent ($2.9 million), electrical machinery by 104 percent or ($22 million), and machinery and transportation equipment by 39 percent ($48 million). It also anticipated some increase in apparel imports from Jordan. But these were not expected to be large, since in 2000, when the study was undertaken, fully 40 percent of Jordanian exports ($30 million) to the United States entered duty free as qualifying industrial zones (QIZ) exports and another 14 percent entered duty free under the generalized system of preferences.

Reflecting on the relatively high Moroccan tariffs that would be removed under the US-Morocco FTA, the USITC (2004a) projected a 14.4

4. If supply is not infinitely elastic, the responses would be smaller than those projected here.

5. The elimination of a 9.16 percent tariff would reduce the domestic price of the US export by (1 – 1/1.0916), i.e., 8.4 percent.

percent increase of US imports from Morocco (of $198.6 million) and a 41 percent increase in US exports to Morocco of $740 million.[6]

Bahrain's trade with the United States is untypical, since a sizable share of its imports from the United States is accounted for by aircraft and aircraft parts that are already free of duties and most of the rest subject to the flat 5 percent duty. A sizable share of Bahrain's exports to the United States were textiles and apparel. In this case, therefore, the USITC anticipated a decline in the US trade balance, with US imports of textiles and apparel from Bahrain estimated to increase by $209 million, considerably more than the expected increase in US exports to the Kingdom (USITC 2004b).

In 2004, US exports to and imports from Oman were $314 million and $422 million, respectively. The USITC (2006) estimates that US exports would increase by 14 percent or $41 million and imports would increase by $42 million. The bilateral trade balance thus would be virtually unaffected.

Since this type of analysis generally projects small effects, it also suggests that the costs of adjustment for the United States of an FTA with the region as a whole would be negligible. Considering the usual rules of thumb of 10 jobs per million dollars in trade, an increase in imports of $660 million translates into 6,600 jobs at the most in the United States. Moreover, almost all of the increased imports would actually displace US imports from other sources. Likewise, Arab countries would for the most part experience a shift in their imports from other countries to the United States. The gains in employment from increased exports to the United States would be modest.

These modest estimates are also in line with more sophisticated simulations of the static gains that have been undertaken using econometric models. For example, Konan and Hoekman (2005) use a general equilibrium model of the Egyptian economy to explore the effects of a variety of trade liberalization scenarios. In one type of liberalization—"shallow"—only tariffs are removed and the sales tax is adjusted to recoup the forgone revenues. In the second type—"deep"—nontariff barriers also are removed on goods (on a nondiscriminatory basis.) as regulatory practices converge with global practices. Table 5.4 reports the results of several of these simulations. In the first four columns, a variety of shallow liberalizations are simulated. Column one shows that undertaking the Euro-Med agreements alone has a small positive impact on Egyptian production (GDP), but actually reduces household welfare because of the trade diversion it entails. Likewise, a simulation of the Greater Arab Free Trade Agreement (GAFTA) alone, eliminating tariffs among Arab countries, also has small and slightly negative effects. The results are more positive but still small relative to GDP when these two initiatives are combined with a

6. In its study, the USITC used a general equilibrium approach and concluded that overall US exports and imports would increase by $267 million and $237.9 million, respectively.

Table 5.4 Evaluation of trade reform scenarios for Egypt

Indicator	Scenario 1 (Euro-Med)	Scenario 2 (GAFTA)	Scenario 3 (Only tariffs 1+2+US FTA)	Scenario 4: (3+all NTBs and services)	Scenario 5 (MFN all tariffs)	Scenario 6 (5 + NTBs and services)
Macroeconomic indicators						
(percent change)						
Household welfare (EV)	–0.24	–0.07	0.16	1.63	0.61	2.10
Real GDP	1.09	0.05	1.79	2.82	2.56	3.62
Consumer price index	0.24	0.07	–0.16	–1.60	–0.60	–2.05
Real exchange rate	1.93	0.17	2.62	3.21	3.56	4.16
Returns to capital	–0.66	–0.10	–0.42	0.84	–0.13	1.16
Returns to labor	1.26	0.07	1.99	3.00	2.80	3.83
Tax rates (ad valorem)						
Weighted average tariff (benchmark: 19.8 percent)	3.51	17.19	1.70	1.57		0
Weighted average GST (benchmark: 7.7 percent)	8.61	7.76	8.87	8.74	9.08	8.95

EV = equivalent variation
GAFTA = Greater Arab Free Trade Area
GST = general sales tax
MNF = most favored nation
NTB = nontariff barriers

Source: Hoekman and Konan in Galal and Lawrence (2005).

shallow US-Egypt FTA. They indicate that all three shallow FTAs combined would boost Egyptian welfare by just 0.16 percent of GDP. Overall, therefore, the conclusions from the general equilibrium approach accords with the partial equilibrium analysis above. This approach indicates that the largest gains would come from completely eliminating all Egyptian tariffs and replacing the tariff revenues with an increase in the sales tax. But even this would raise household welfare by just 0.61 percent and boost real GDP by 2.56 percent.[7] The central message is that while there are positive effects on output by removing tariffs on trade goods—GDP could increase by 2.56 percent—these effects would be largely offset by the decline in Egypt's terms of trade, and thus the effects on welfare would be fairly limited.

Nontariff Barriers and Services

The simulations of "deeper integration" generate much larger welfare gains. If Egypt, for example, used an FTA with the United States not only to eliminate tariffs but also to eliminate nontariff barriers and barriers to cross-border trade in services, it could boost welfare by significantly greater magnitudes. Such a simulation undertaken by Hoekman and Konan (2005) finds that this raises household welfare by 1.63 percent (10 times the improvement with shallow integration) and GDP by 2.82 percent. One reason that services liberalization has such positive welfare effects is the important role that services play in the Egyptian economy, but another is the absence of trade diversion. When a sector has little trade to begin with, even preferential trade liberalization will have positive effects, since there can only be trade creation.

In another study, Konan and Kim (2004) simulate the impact of services liberalization and obtain even larger welfare benefits when they include the liberalization of investment in services. They find that liberalizing cross-border services trade improves household welfare by 0.78 percent and raises GDP by 1.07 percent of GDP, magnitudes similar to that obtained in moving from the shallow to the deep integration scenario above. But they also find that liberalizing foreign investment in services produces large gains, raising Egyptian welfare by 6.9 percent and GDP by 11.85 percent. All told, liberalization of goods and both cross-border and foreign investment in services raises Egyptian GDP by 14.8 percent and improves household welfare by 8.35 percent. The real returns to labor and capital in this scenario increase by 14.4 and 12.77 percent, respectively. In a similar exercise for Tunisia, welfare gains of 8.32 percent from liberalization of goods and services are similar to those for Egypt, although in

7. Labor obtains these benefits—the returns to labor rise by 2.8 percent, while capital suffers small losses as returns decline by 0.13 percent.

Tunisia's case this is more attributable to goods liberalization and relatively less to services because manufacturing has a substantially higher share in output.

All in all, while positive gains are to be had from trade liberalization through an FTA, the really substantial payoffs come if such agreements are used as an opportunity to free up services to foreign investors and introduce competition to sectors of the Arab economy that at present are highly protected. As Hoekman and Konan (2005, 59) point out, by reducing markups in services and improving efficiency, these changes reduce the costs of key inputs (finance, insurance, transportation, and telecommunications) that are used by other sectors in the economy. In addition, the foreign investors generate positive employment effects, since many of services they provide are produced locally.

Dynamic Effects

The static calculations of the impact of FTAs, whether partial or general equilibrium, assume that the structure of the economy will basically be unchanged. Yet an FTA also offers the opportunity to alter the structure in a manner that will not easily be captured in this framework. One important example relates to the effects of creating new industries.

The USITC (2000) study on Jordan, for example, argued that Jordan would enjoy some gains in its apparel exports to the United States, but since those exports for the most part already enjoyed duty-free access under a QIZ in effect for several years, the additional growth would not be large. Since on average Jordanian tariffs were relatively higher than those in the United States, the expectation was also that the bilateral US trade surplus would grow. As reported in table 5.5, these expectations were seriously off the mark.

Jordanian exports to the United States increased from $72.8 million in 2000 to a stunning $1.267 billion in 2005. The exports were so large that the bilateral balance of traded shifted from a Jordanian deficit of $239 million in 2000 to a surplus of $624 million in 2005. Imports under the QIZ program rose from $159,000 in 1999 to $30.12 million in 2000 and to $945 million in 2005. Non-QIZ exports increased from $42.7 million in 2000 to $322 million in 2005, while US exports to Jordan increased from $312 million to $643 million over the same period. Jordan's share of overall US has also increased, although it remained very small at just .071 of a percent in 2005. While still a very small market—US exports in 2004 amounted to $819 billion—there is clear evidence that the FTA has stimulated bilateral trade for both countries.

It is also noteworthy that Jordan has been able to use the trade concessions granted by the United States to stimulate a new export capability. To be sure, the QIZ experience has not been without controversy because for-

Table 5.5 US-Jordan trade (billions of US dollars)

Item	1998	1999	2000	2001	2002	2003	2004	2005
US Exports (FAS)								
Total US exports to Jordan	.35	.28	.31	.34	.40	.50	.55	.64
US exports to world	680.47	692.82	780.42	731.03	693.26	723.74	816.55	904.38
US imports (customs value)								
US imports from Jordan	.02	.03	.07	.23	.41	.67	1.10	1.27
QIZ	0	0	.03	.18	.37	.56	.93	.95
Free trade agreement	0	0	0	0	.01	.03	.02	.25

FAS =
QIZ = qualified industrial zones

Source: US International Trade Commission, www.usitc.gov (accessed September 15, 2006).

eign participation has been dominant and the backward linkages into the rest of the Jordanian economy relatively weak (Kardoosh and al Khouri 2004). While employment in December 2005 was 45.8 thousand, the number of local workers employed numbered just 19.4 thousand and foreign-owned companies accounted for 78 percent of the total investment (Zingher 2006). Nonetheless, the relevant comparison is a counterfactual case in which these opportunities would not have been present. The experience was sufficiently positive as to impress the Egyptians, who were successful in obtaining a similar arrangement that began operating in 2005. Egypt's garment sector is much more developed than Jordan's was at a similar stage. In addition, the Egyptians have designated geographic regions rather than industrial parks and the entire initiative has been strongly supported by the Egyptian private sector. This suggests that in the Egyptian case, the backward linkages are likely to be more extensive.

Once the US-Jordan FTA is phased in fully, the rationale for the QIZs is likely to disappear. Nonetheless, it serves as a useful reminder that major tariff concessions can provide new opportunities, but that by themselves they are certainly no panacea.

It is noteworthy that the Jordanian QIZ experience is not the only case of conventional models seriously underestimating the dynamic effects of an FTA. Kehoe (forthcoming) evaluated the performance of applied general equilibrium models on the impact of the North America Free Trade Agreement and found that these models drastically underestimated its trade effects, particularly in sectors in which there originally was little trade.

Conclusions

MEFTA will eliminate all tariffs on trade between the United States and the Arab countries. The starting point for thinking about its impact, therefore, is to examine the data on the current levels of bilateral trade and the duties that are currently paid. Bilateral trade between the United States and the Arab countries accounts for relatively small shares of overall trade for both parties. While some Arab countries levy fairly high tariffs on US exports, the United States generally charges very small duties on Arab exports to the United States. The predictable result of simulations of freeing this trade is that the impact is fairly small, and that in most cases US exports increase by more than Arab exports, i.e., the bilateral trade balance for the United Stats increases.

By capturing only the static effects of eliminating tariffs on goods, this type of simulation clearly understates the impact of the agreements. It focuses on coverage that is too narrow and ignores dynamic effects. The US agreements are intended to eliminate nontariff barriers as well as tariffs, and to liberalize services trade and foreign investment as well as trade in goods. Simulations that estimate these additional effects suggest effects that could be far greater than those considering only tariffs on goods. Indeed, if the agreements stimulate extensive liberalization, particularly with respect to foreign investment in services, and if this liberalization is extended to other trading partners, the impact could be on the order of 10 percent of GDP. In addition, the models used for these simulations typically assume that the structure of trade will remain unchanged, and therefore they capture only the responses induced to the goods that are currently traded. As Jordan's experience with the QIZ demonstrates, however, trade agreements could change the trade structure by inducing new export products, thereby generating effects that conventional modeling ignores. Likewise, the models fail to capture the way in which such agreements could stimulate additional policy measures, and the effect of locking in policy changes, thereby reducing uncertainty.