

**THE GCC CUSTOMS UNION AND PROPOSED EU-GCC FREE TRADE AGREEMENT
IN A COMPUTABLE PARTIAL EQUILIBRIUM MODEL
OF WORLD TRADE**

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Abstract

Using a simple quantitative model of world trade, this paper finds that the new Gulf Cooperation Council (GCC) customs union and the proposed EU-GCC free trade agreement (FTA) both expand trade and improve economic welfare in the GCC countries, with little significant economic impact on the EU. The FTA leads to greater economic gains than the GCC customs union alone because it affords GCC consumers wider opportunity to enjoy imports at duty-free world prices and provides GCC exporters with preferential access to the lucrative EU market. Although welfare gains under the proposed FTA begin to approximate those under open regionalism (concerted trade liberalization on an MFN basis), reducing the present 5 percent GCC common external tariff to about 3 percent as part of the proposed FTA would better ensure near-maximum economic gains for the GCC countries. It would also better ensure the attractiveness of the GCC countries to outward-oriented foreign direct investment.

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1. Introduction

Poor economic performance is widely believed to be a contributing factor to the political insecurity of the Middle East and the wider Middle East and North Africa (MENA) region. Notwithstanding the petroleum resources of several MENA countries, including prominently the six countries that comprise the Cooperation Council for the Arab States of the Gulf (GCC) -- Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) -- the MENA countries have widely failed to enjoy the same degree of increased growth and economic well-being that emerging market countries in other parts of the world have enjoyed during the past two decades.¹ Indeed, this failure by the GCC countries and other poorly performing MENA countries has become the focus of international concern for improving the region's economic well-being and for seeing peace and security established in the region.

Reasons for the poor economic performance of the MENA countries are numerous and complex, but an important element is their basic inward-orientation which has fostered not only comparatively high protection but also inefficient domestic investment and excessive government planning and regulation. Reversing this situation involves not only lowering protection and encouraging outward-oriented foreign direct investment but also fostering reforms to domestic economic policies and institutions to restore greater private sector initiative.

The GCC countries are more open to trade than other countries in the MENA region. Nonetheless, per capita growth has been disappointing in the GCC countries, led in particular by the negative per capita growth of Saudi Arabia during the 1990s (Table 1).² Also, though foreign investment is somewhat higher in the GCC countries than the rest of MENA, it is concentrated mainly in the oil sector, with little consequent benefit to diversification and expansion of industry, or to employment. Recognizing the potential of further trade liberalization to help improve their economic performance, the GCC countries converted their erstwhile free trade area into a customs union in January 2003 and agreed to accelerate ongoing negotiations of a free trade agreement (FTA) with the European Union.³

¹ See Abed (2003), Dasgupta, Keller, and Srinivasan (2002), and Hoekman and Messerlin (2002).

² Overviews of GCC trade in services and GCC directions and structure of merchandise trade are presented without discussion in accompanying Tables 2-4.

³ The GCC was established in 1981, though it is not known when the bloc's free trade area came fully into force. See WTO (1995), Roy and Zarrouk (2002), and PricewaterhouseCoopers (2003).

Although these developments leave "deeper" liberalization and possible integration of economic policies behind the borders of GCC countries for future regional and bilateral negotiations, their static impact on trade and economic welfare are of considerable interest to both EU and GCC economic policy makers. This paper reports the results of an applied, static analysis of the new GCC customs union and the proposed EU-GCC free trade agreement using a simple MENA-focused model of world trade, disaggregated by major sections of the harmonized system (HS) of traded goods and incorporating current tariff information for the European Union, GCC countries, other MENA countries, and the rest of the world.

The remainder of the paper is divided into three sections. Section 2 describes the MENA trade simulation model and its application to the new GCC customs union and the proposed EU-GCC FTA. Section 3 then presents the simulation results found by the model for not only the GCC customs union and the proposed FTA with the European Union but also "open regionalism," that is, concerted trade liberalization by the EU and GCC countries on a most-favored-nation (MFN) basis. Finally, Section 4 summarizes the principal findings of the study.

2. The MENA Trade Simulation Model

Basic Model

The MENA trade simulation model is a simple Vinerian model of world trade developed to quantify the economic impacts of the new GCC customs union and proposed EU-GCC FTA.⁴ In addition to trade of individual GCC and other MENA countries, the model includes trade of the European Union (as a bloc), Japan, the United States, other industrial countries (as a bloc), and other developing countries (as a bloc) to yield a complete model of world trade in homogeneous goods, disaggregated by the 21 major sections of the harmonized system (Table 5). The "small country" assumption is maintained throughout the model. Under this assumption, each country is assumed to be insufficiently large to affect its international terms of trade through variations in the volume of either its exports or imports.

As described in the Appendix, the basic model is based on familiar (log-linear) import demand and export supply functions for traded goods and, as seen in Table 5, covers all merchandise trade. Market-clearing conditions for each category of traded goods determine international prices, and an

⁴ Viner (1950). On Vinerian and more general approaches to customs union theory, also see Meade (1955), Lipsey (1970), Lloyd (1982), Robson (1987), Pomfret (1988), and DeRosa (1998).

equilibrium balance of payments condition determines the (real) exchange rate of each country.⁵ In addition to determining changes in trade flows and import tariff revenues, the model computes changes in economic welfare based on familiar notions of consumer surplus and producer surplus (Harberger 1954, 1971). The present version of the model does not explicitly account for nontariff barriers.⁶

Representing a Customs Union or FTA

Representing a customs union or FTA in the MENA trade simulation model requires special consideration of price determination in the model. Additional equations to calculate trade creation, trade diversion, and changes in economic welfare are also included in the model.

Price Determination⁷

In the basic model, the international price of good k expressed in U.S. dollars, P_k^* , is determined largely independently of the behavior of consumers and producers in any single country or any small group of countries. Under a customs union or FTA, however, trade of member countries with non-member countries might be largely diverted, and an independent intra-bloc export price for good k , P_k^r (denominated in U.S. dollars), might be established so long as the intra-bloc export price is falls within acceptable bounds to bloc producers and consumers who, notwithstanding their inclusion in a customs union or FTA, are assumed to have continued recourse to international markets for traded goods.

Two bounds on intra-bloc prices, both contingent upon the comparative advantage of the new trading bloc, must be highlighted:

⁵ The real exchange rate is defined as the aggregate price of nontraded goods in terms of traded goods in the model. In effect, the aggregate price of nontraded goods is the numeraire in the model. Corden (1971) and Dornbusch (1974) provide theoretical underpinnings for the model. On applied economic models for trade and development policy analysis that incorporate both traded and nontraded goods, and on the determination of nominal and real exchange rates in such models, see Robinson (1989), Francois and Reinert (1997), and Ginsburgh and Keyzer (1997).

⁶ The influence of nontariff barriers in MENA and other regions is captured in the model by the fitted values of the import demand intercept terms. In simulations of the model the implicit assumption is that binding nontariff barriers are simultaneously eliminated as part of the GCC customs union and EU-GCC FTA scenarios.

⁷ The elements of regional price determination in the MENA trade simulation model take inspiration from similar elements in an applied economic model of a hypothetical customs union in South Asia developed by Hossain and Vousden (1998), and an earlier version of the MENA trade simulation model developed by DeRosa and Saber (2000).

Lower price bound: If good k lies within the comparative advantage of member countries (i.e., the trading bloc is expected to remain a net exporter of good k to the world), then P_k^r cannot fall below the international price P_k^* .

Upper price bound: If good k lies outside of the comparative advantage of member countries (i.e., the trading bloc is expected to remain a net importer of good k from the world), then P_k^r may lie above P_k^* by a finite premium (specified below).

To enforce these two bounds on intra-bloc prices, the MENA trade simulation model sets intra-bloc prices P_k^r based on considerations for the new trading bloc's comparative advantage and structure of external tariffs. On the one hand, if member countries as a bloc are net exporters of the good to the world, as for example would certainly likely be the case for petroleum and other mineral products in any GCC-based trading bloc, the intra-bloc price of exports is set equal to the international price of the traded good. In this instance, the customs union or FTA succeeds in lowering the price of imports to consumers in the preferential trading area if member countries impose an external tariff on imports of the good.

On the other hand, if member countries as a bloc are net importers of the good from the world, then the intra-bloc price of exports P_k^r is set equal to the international price multiplied by one plus a premium τ_k^r equal to highest external tariff of the bloc member whose import demand just "clears" the bloc's combined exports of the product. Notably, in the case of a customs union the premium will be equal to common external tariff for the product. Also, in the case of either a customs union or FTA, the preferential trading arrangement will succeed in lowering import prices faced by consumers only in those member countries for which the premium is lower than the external tariff.⁸

In the MENA trade simulation model, each country's balance of payments is valued at border prices, in U.S. dollars. Under the GCC customs union and EU-GCC FTA, all exports of member countries are valued at the intra-bloc export price P_k^r . All imports of member countries, on the other hand, are valued at the intra-bloc export price P_k^r or at the world price P_k^* , accordingly as the external tariff of member country i for good k , $t_{k(i)}$, is greater than or less than τ_k^r .

⁸ In the MENA trade simulation model, the regional premium in "non-competitive" sectors is approximated using a downward-sloping linear relationship between external tariff levels and total import demand of member countries vis-à-vis the total export supply of member countries. The parameters of the linear relationship between external tariff levels and total import demand are estimated by ordinary least squares regression after first ranking member country tariffs from highest to lowest and calculating the cumulative bloc import demand at each tariff "step."

The foregoing intra-bloc price relationships under a GCC customs union or EU-GCC FTA posit (1) lower consumer prices and unchanged border prices for internationally competitive goods produced by bloc exporters, and (2) lower consumer prices but higher border prices for non-internationally competitive goods produced by bloc exporters for member countries whose external tariffs are greater than (or equal to) the intra-bloc export premium τ_k^r .⁹ The higher border prices for non-internationally competitive goods include (per unit) forgone tariff revenues of importing member countries captured by exporters in partner member countries. Also in the latter case, the MENA trade simulation model assumes that, while member countries continue to import from non-member countries, member countries divert the entire volume of their exports of non-competitive goods to partner member countries in response to the higher intra-bloc prices for their exports under the customs union or FTA, thereby maximizing their export revenues.¹⁰

Trade Creation, Trade Diversion, and Economic Welfare

The MENA trade simulation model computes trade creation, trade diversion, and changes in economic welfare in member countries of the customs union in a recursive manner, after the basic model is solved first for equilibrium trade volumes, domestic and international prices, and exchange rates.

Trade Creation. Trade creation ($TC_{k(j)}$) of good k for an individual member country j occurs when the customs union or FTA causes the domestic price of imports of good k in country j , $P_{k(j)}^m$, to fall and imports of the good, $M_{k(j)}^d$, to rise. Thus, trade creation in the MENA model is computed simply as the change in imports:

$$(3) \quad TC_{k(j)} = \Delta M_{k(j)}^d$$

where Δ denotes change-in-variable between the base case (no preferential trading arrangement) and the preferential trading arrangement case.

⁹ For member countries whose external tariffs are lower than the intra-bloc export premium τ_k^r , consumer prices and border prices of imports are unchanged.

¹⁰ This is a particularly strong assumption that follows from the model's assumption that similar traded goods are perfect substitutes for one another. In other applied international trade models that assume similar traded goods are imperfect substitutes for one another (following the so-called Armington assumption), trade diversion is likely to be less pronounced.

Trade Diversion. Trade diversion (TD_k) of good k is equal to the total decrease in demand by member countries for imports of good k from non-member countries. In the model, bloc-wide trade diversion is computed simply as the increase in supply of exports of good k by member countries (j), $X_{k(j)}^s$, in response to higher intra-bloc prices for exports of non-competitive goods ($k=nc$):

$$(2) \quad TD_{k=nc} = \sum_j [\Delta X_{k(j)}^s] .$$

Trade diversion for individual (importing) members of the customs union or FTA is then calculated on an *ad hoc* basis, because the model does not explicitly determine changes in bilateral trade. Specifically, bloc-wide trade diversion for good k is apportioned to member countries whose external tariffs are greater than or equal to the intra-bloc export premium τ_k^r according to their share in the total imports of good k under the customs union or FTA.

Economic Welfare. The impact of a customs union on economic welfare is divided into three components: changes in consumer surplus, changes in producer surplus, and forgone import tariff revenues.¹¹ Consumer surplus refers to the net benefit that consumers derive from purchases of a good at market prices at less than their marginal benefit from the good (i.e., the Harberger triangle formed by the area beneath the demand curve and above the market price, less reduced import tariff revenues captured by domestic consumers). Producer surplus refers to earnings producers enjoy at market prices above their marginal variable costs (i.e., the Harberger triangle formed by the area above the marginal cost curve and below the market price). Finally, forgone tariff revenues are reduced import tariff revenues captured by member country exporters under the customs union or FTA through their margins of preference under the preferential trading arrangement.

On a combined basis, changes in consumer surplus and producer surplus, less forgone tariff revenues, equal the change in national economic welfare. The change in consumer surplus corresponds to the change in national welfare occasioned mainly by trade creation; the change in producer surplus corresponds to the change in national welfare occasioned mainly by trade diversion; and forgone tariff revenues correspond to the change in national welfare owing to forgone tariff revenues on duty-free

¹¹ On the fundamentals of consumer and producer surplus, see Harberger (1954, 1971). On their application in partial equilibrium trade models, see for instance Francois and Hall (1997).

imports that would otherwise have been captured by government and redistributed to domestic consumers in one form or another.¹²

Database and Parameter Values

The MENA trade simulation model covers trade in 21 broad categories of goods by nineteen MENA countries (including the six GCC countries), the European Union, Japan, the United States, other major industrial countries, and other developing countries (Table 5). The model's underlying database of international trade statistics, presented in the Appendix, is compiled on an average basis for 1999-2001 from the COMTRADE database of the United Nations Statistics Division (UNSD 2003). Corresponding protection statistics detailing *ad valorem* tariffs applied to imports on an MFN basis, presented in Table 6, are compiled from the UNCTAD Trade Analysis and Information System (UNCTAD 2003), for the most recent year available.

The remaining parameters in the MENA trade simulation model consist of own-price elasticities of import demand and export supply (Table 7). Values of these parameters, which are assumed to be identical for all countries in the model, are *a priori* values based on estimates of price elasticities in international trade reported in surveys of econometric studies such as Stern et al. (1976).

The MENA trade simulation model was constructed using VORSIM, personal computer software for construction and simulation of economic models in Microsoft Excel (Roningen 2003).

3. Quantitative Results

Trade Liberalization Scenarios

The MENA trade simulation model is applied here to assess the trade and welfare impacts of the recently adopted GCC customs union and the proposed EU-GCC FTA. For comparative purposes, the model also considers the impacts of alternative scenarios in which (1) the GCC countries set their common external tariff at a level lower than the 5 percent level adopted officially,¹³ and (2) the EU and GCC countries extend their free trade agreement to the world at large on an MFN basis, in effect,

¹² Note that forgone tariff revenues are captured by exporters of non-competitive goods in customs union or FTA member countries as part of their producer surplus.

¹³ The GCC common external tariff includes exclusions for "essential" goods in a total of 53 HS 6-digit level categories (Roy and Zarrouk 2002). These exclusions are not accounted for in the present analysis. Also notably, the MENA trade simulation model does not take into account the erstwhile GCC free trade area or other pre-existing free trade agreements between individual countries in the model.

adopting a policy of open regionalism similar to that espoused on normative economic grounds by economists and some international organizations.¹⁴

In all, five trade liberalization scenarios are considered (Table 8). Scenarios 1 and 3 correspond to the recently adopted GCC customs union and proposed EU-GCC FTA, assuming a uniform 5 percent CET in the GCC countries. Recognizing that Kuwait and Qatar previously maintained an average tariff level of less than 5 percent, Scenarios 2 and 4 consider the impacts of a lower, non-uniform CET, namely, one set at the minimum level of GCC tariffs in each goods category (corresponding to an average CET of 3.3 percent). Last, in the open regionalism scenario (Scenario 5), the EU and GCC jointly pursue free trade on a MFN basis.

Given that the MENA trade simulation model does not explicitly incorporate nontariff barriers, the five scenarios implicitly assume that the EU and GCC countries simultaneously eliminate nontariff barriers to imports.

Finally, Table 8 identifies the internationally competitive sectors in the MENA trade simulation model under each of the preferential trade liberalization scenarios (Scenarios 1-4). As expected, in the basic GCC customs union scenarios, mineral products is the sole competitive sector. Given that imports of mineral products are not highly protected in the GCC countries, the benefit to GCC consumers is likely to be limited. On the other hand, GCC exporters are likely to gain significantly from the margins of preference under the new customs union in the remaining non-competitive sectors, though they will be constrained by the magnitude of the CET. The proposed GCC FTA with the European Union expands the number of internationally competitive sectors to include several, mainly manufactured goods in which substantial trade creation might be expected to occur in especially the GCC countries under the proposed free trade agreement. At the same time, the proposed EU-GCC FTA would be expected to open new opportunities for expanded exports by GCC exporters to the EU as well as neighboring Gulf countries in the remaining non-competitive sectors.

A priori, expected gains to EU consumers are more problematic given relatively low tariff protection in the European Union.¹⁵ EU exporters, however, might expect significant gains in

¹⁴ For discussion, mainly in the context of support for the concept by the Asia Pacific Economic Cooperation (APEC) group, see Bergsten (1997). See also ADB (2000) and Schiff and Winters (2003).

¹⁵ Notably, under the proposed EU-GCC FTA, EU consumers do not benefit from trade creation in the internationally competitive sectors identified in Table 8 because it is the aggregate export capacity of the EU countries themselves that is responsible for the several sectors identified in the table.

conjunction with their margins of preference in GCC countries in the non-competitive sectors identified in Table 8.

Simulation Results

The MENA trade simulation model results for the GCC and the EU are summarized in Table 9 and Table 10 respectively, disaggregated by three broad trade categories: agriculture, minerals, and manufacturing. Simulation results are presented in a like manner for the six individual GCC countries in Tables 11-16. Detailed simulation results by the 21 trade categories in the model are reported in the Appendix.

The simulation results for the GCC customs union are considered first, then the simulation results for the proposed EU-GCC FTA. This ordering of the discussion is intended to aid in discerning the marginal impact on the GCC countries of adopting the FTA "on top of" their recently adopted customs union. Finally, the simulation results for the open regionalism scenario, considered last, provide an indication of the degree to which the customs union and proposed FTA result in trade and welfare impacts approximating those under the most liberal free trade arrangements possible between the GCC countries and EU.

GCC Customs Union

Under the GCC customs union, the GCC countries simultaneously adopt a zero tariff on imports from one another and a common external tariff on imports from the rest of the world. Given the initial MFN tariff rates of GCC members in Table 6, the 5 percent CET involves a substantial reduction in the average level of tariff protection in the GCC countries, except Kuwait and Qatar which previously applied an average tariff rate of 3-to-4 percent. Thus, although the CET might be expected to be trade creating in Bahrain, Oman, Saudi Arabia, and the United Arab Emirates, it might be less so in Kuwait and Qatar, the two most outward-oriented GCC countries. Recognizing this, the second customs union scenario considers the impact of a CET set no higher than the lowest tariff level of the GCC countries in each commodity category (resulting in an average CET of 3.3 percent). This "textbook" version of the GCC customs union leaves no GCC member compelled to adopt a higher

external tariff, and hence might be expected to result in greater economic benefits for Kuwait and Qatar, and the GCC bloc as a whole.¹⁶

In Table 9, both representations of the GCC customs union result in depreciation of GCC exchange rates by 3-to-4 percent on average, as demand for especially imports of manufactures is stimulated in member countries by the component of general trade liberalization under the new customs union. Simultaneously, export prices in domestic currency terms rise (reflecting the exchange rate adjustment necessary to maintain balance of payments equilibrium), giving exporters incentive to increase their exports of not only mineral products (chiefly petroleum) but also manufactured products such as chemicals, metal products, and textiles and apparel -- the most labor-intensive of these categories being typically apparel (see Appendix Table 21). Although mineral products dominate the expansion of GCC exports, in proportional terms the expansion of manufactured exports is substantially greater than the 2.4-to-2.9 percent expansion of overall exports reported in Table 9, owing to the significantly higher value of the price elasticity of export supply for manufactures (1.0) than petroleum and other mineral products (0.5) in the MENA trade simulation model.

The expectation that the minimum CET should lead to greater benefits than the 5 percent CET is *not* confirmed in the simulation results. Although GCC consumers clearly gain more under the minimum CET, the economic gain of GCC exporters under the 5 percent CET is substantially more than that enjoyed by consumers following from the greater trade diversion under the 5 percent CET. Thus, the customs union increases overall economic welfare in member countries by 1.9 percent of GDP under the 5 percent CET but only by 1.6 percent of GDP under the minimum CET.¹⁷

Under the GCC customs union, GCC tariff revenues decline by between \$5,845 million and \$6,356 million, or by about 2 percent of GDP. However, only \$300-to-\$500 million of this decline in tariff revenues is forgone tariff revenues and a true economic cost. The remaining tariff revenue losses are simply transfers between the government and domestic consumers, with no net impact on national economic welfare.

¹⁶ Economic textbooks often consider customs unions preferable to free trade areas because, for political economy reasons, customs unions tend to establish a common external tariff at or near the lowest external tariff level of their members.

¹⁷ This pattern of results is nearly uniform across the individual member countries, including the two low-tariff countries, Kuwait and Qatar.

EU economic welfare is not affected by adoption of the GCC customs union (Table 10). The modest impact on EU trade found by the MENA trade simulation model occurs only indirectly through the adjustment of world prices.

EU-GCC FTA

The proposed EU-GCC FTA provides wider opportunities for preferential market access and economic gains by GCC exporters, namely, in the lucrative EU market. As noted previously, GCC consumers should also be expected to benefit from duty-free imports from the European Union in the internationally competitive sectors identified in Table 8, including (among others) chemicals, machinery, and transport equipment.

In Table 9, the proposed FTA results in greater depreciation of the exchange rate in GCC countries (about 6.4 percent on average) than under the GCC customs union, and in Table 10 to a modest appreciation of the EU exchange rate (about 0.3 percent).

For the GCC countries, the exchange rate impact follows from expanded duty-free imports from the European Union and from greater diversion of trade in GCC countries under the FTA, both of which initially add to total border costs of GCC imports. The greater depreciation of GCC exchange rates calls forth greater expansion of member country exports under the FTA. This expansion of exports occurs principally in agricultural and mineral products. It reflects the fact that trade diversion under the FTA is focused in manufactures, resulting in weaker world prices for manufactures as EU exports to GCC countries supplant exports of non-member countries.

Overall, GCC economic welfare improves by 2.3 percent of GDP under the proposed FTA, in both the 5 percent CET scenario and the minimum CET scenario. The largest part of this gain corresponds to the increase in producer surplus (2.5 percent of GDP), following from the combined impacts on GCC exports of exchange rate depreciation and diversion of particularly GCC exports of manufactured foodstuffs and textile and apparel products to the EU. At the same time, GCC tariff revenues deteriorate by between 2.7 percent and 2.8 percent of GDP under the FTA, though (again) only a very small part of this deterioration -- namely, forgone tariff revenues amounting to about 0.2 percent of GDP -- is a true economic cost to the GCC countries.

For the European Union, the proposed FTA results in positive but very small trade and welfare impacts in proportion to EU trade and output. Though EU imports expand several times more

than GCC imports, the expansion in EU imports amounts to only about 1 percent of total EU imports. Similarly, overall economic welfare in the EU expands by only about 0.2 percent of GDP, corresponding almost entirely to the gain in EU producer surplus (EU exports expand chiefly in manufactured foodstuffs, textiles and apparel, and professional equipment). EU tariff revenues under the proposed FTA decline by 0.5 percent of GDP, of which forgone tariff revenues are virtually nil in proportion to GDP. Finally, it is again apparent that choice between the 5 percent CET or the minimum CET makes very little difference to the simulation results under the proposed FTA.

Open Regionalism

The simulation results for MFN trade liberalization are clearly superior to those for either the GCC customs union or the proposed EU-GCC FTA. They indicate that economic welfare relative to GDP would be improved by 2.7 percent on average in the GCC countries and by 0.6 percent in the European Union. It is also apparent that losses in tariff revenues for the GCC countries and EU are greater under open regionalism than under either the customs union or FTA. However, unlike in preferential trade liberalization schemes, changes in tariff revenues under MFN trade liberalization are entirely transfers between the government and domestic consumers because no trade diversion or forgone tariff revenues occur.

The aggregate welfare gain for the GCC countries under the EU-GCC FTA (2.3 percent) is similar in magnitude to that for the GCC countries under open regionalism (2.7 percent). Thus, the proposed FTA with the European Union should be strongly preferred by GCC countries to their current customs union which yields an appreciably smaller aggregate welfare gain (1.9 percent).

Finally, although the minimum CET does not appear to yield welfare gains for the GCC countries appreciably closer to their welfare gains under open regionalism, additional simulations of the MENA trade simulation model indicate that a uniform CET for the GCC countries of about 3 percent or less does yield trade and welfare gains for the GCC countries that are decidedly closer to the trade and welfare gains under open regionalism. For instance, as illustrated in Table 17, reducing the GCC customs union CET from 5 percent to 2.5 percent under the proposed FTA raises the aggregate welfare gain for the GCC countries from 2.3 percent of GDP to 2.5 percent of GDP (notably, accompanied by a reduction in trade diversion in the GCC countries from 7.6 percent of total GCC

imports to just 1.4 percent).¹⁸ Adopting a lower CET under the proposed FTA, say, in the range of 2.5-to-3.0 percent, would also further increase the attractiveness of the GCC countries to outward-oriented foreign direct investment by multinational corporations, given that foreign direct investment decisions in the world economy today are importantly influenced by the openness of the host country's trade regime.

4. Conclusion

Against the backdrop of the recent dismal economic performance of several GCC countries and increasing concerns for productive employment of both skilled and unskilled labor in these countries, this paper has sought to quantify the economic impacts of the new GCC customs union and proposed EU-GCC FTA on the major Gulf countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. Using a computable partial equilibrium model of world trade focused on the MENA countries, the analysis presented here yields insights to the possible trade and welfare impacts of the new and proposed preferential trading arrangements between the GCC countries and the European Union, albeit limited by not only the shortcomings of the simple quantitative model but also the still incomplete details surrounding the new GCC customs union and the ongoing negotiations of the proposed free trade agreement between the EU and GCC countries.

The quantitative results found by the MENA trade simulation model indicate that both the new GCC customs union and the proposed EU-GCC FTA would appreciably expand trade and improve economic welfare in the GCC countries, with little significant economic impact on the European Union. Given the dominance of petroleum in the exports of the GCC countries, adjustment of trade in this sector dominates much of the quantitative results. However, both the new customs union and the proposed preferential trading arrangement also significantly stimulate GCC exports in some other important sectors, including labor-intensive manufacturing sectors such as apparel and in more skilled labor-intensive manufacturing sectors such as chemicals and metal products.

As might be expected, the proposed EU-GCC FTA results in larger trade and welfare gains for the Gulf countries than the GCC customs union. These can be traced importantly to the opportunities that the proposed FTA would provide GCC consumers to enjoy imports of chemicals, machinery, and

¹⁸ Economic welfare is also enhanced in the European Union by a lower CET for the GCC countries (Table 18). EU economic welfare improves from 0.2 percent of GDP (5 percent CET) to 0.4 percent of GDP (2.5 percent CET). Trade diversion in the EU, however, increases more than 100 percent under the lower CET, to the benefit of particularly GCC exporters of manufactures.

transport equipment, among other major categories of trade goods, at duty-free world prices. They can also be traced importantly to greater economic gains for GCC exporters, in response to not only preferential access to the lucrative EU markets but also greater depreciation of GCC exchange rates under the proposed FTA.

Although simulated welfare gains under the proposed FTA are superior to those under the new GCC customs union, and begin to approximate potential welfare gains under a policy of open regionalism, the GCC countries might consider lowering their current CET, from 5 percent to a figure closer to 3 percent, as part of the current FTA negotiations. This would better ensure that the GCC countries not only enjoy trade and welfare gains decidedly closer to the maximum economic gains under open regionalism (or nondiscriminatory trade liberalization) but also improve their attractiveness to the outward-oriented foreign direct investment widely believed necessary for the GCC countries to achieve further improvement to their growth and economic welfare.

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World Trade Simulation Model (WTSM)

The MENA trade simulation model is a compact version of WTSM, a simple computable partial equilibrium model of world trade developed by Potomac Associates for application to a variety of multilateral, regional, and unilateral trade policy issues.¹⁹ This appendix presents the main elements of the model in some detail, notably including consideration for two factors not incorporated in the MENA trade simulation model: (1) possible inter-industry demands for traded goods and (2) protection arising from not only tariffs but also nontariff barriers (NTBs) to imports. Finally, although WTSM does not account for substitution between traded goods in consumption and production or for income determination (two important hallmarks of computable general equilibrium (CGE) models), the model does determine domestic and international prices that are consistent with balance of payments equilibrium in each country of the model, through determination of the equilibrium real exchange rate.

Import Demand

Import demand ($M_{k(i)}^d$) for traded good k by each country i is given by the relationship:

$$(1) \quad M_{k(i)}^d = c_{k(i)}^m [P_{k(i)}^m - \sum_j (a_{jk(i)} P_{j(i)}^m)]^{\eta_{k(i)}}$$

where

$$P_{k(i)}^m = [P_k^* (1 + t_{k(i)}) / e_{(i)}]^{[1-f_{k(i)}]} [P_{k(i)}^{ntb}]^{f_{k(i)}}$$

and where $P_{k(i)}^m$ is an index of the domestic price of imports of good k in country i , a_{jk} is the amount of good j necessary to produce one unit of output of good k in country i , $\eta_{k(i)}$ is the own-price elasticity of import demand for good k in country i , P_k^* is the world price of good k denominated in U.S. dollars, $t_{k(i)}$ is the *ad valorem* MFN tariff rate for good k in country i , $e_{(i)}$ is the exchange rate of country i 's currency in terms of the U.S. dollar, $f_{k(i)}$ is the frequency of nontariff barriers facing imports of good k in country i , and $P_{k(i)}^{ntb}$ is the domestic price of imports of good k in country i covered by nontariff barriers. Equation (1)

¹⁹ DeRosa (2000). See the Potomac Associates web site (www.PotomacAssocs.com) for examples of trade policy studies undertaken using variants of WTSM.

posits that import demand in each country i is a positive function of the exchange rate, the domestic price of imported inputs, and the (absolute value of the) price elasticity of import demand, and a negative function of the world price of good k , the tariff rate, the domestic price of imports covered by NTBs, and the frequency of nontariff barriers.

Equation (1) also posits that import demand in each country i is a negative function of the (imputed) domestic price of value-added $[P^m_{k(i)} - \sum_j (a_{jk(i)} P^m_{j(i)})]$. This specification of import demand is not rigorously derived, but it points to the importance of the costs of intermediate goods in production and how these costs should be expected to influence international competitiveness, notably, in the determination of import demand (and export supply, as seen further below). At the same time, it should be noted that the model does not account explicitly for intermediate demands for goods implied by the specification of domestic value-added prices as determinants of import demand and export supply.²⁰

Nontariff barriers are assumed to limit the supply of imports to the country imposing the barriers, and so they are assumed to have an equivalent effect as quantitative restrictions on imports. With sufficient information about domestic prices and quantities of imports covered by nontariff barriers, and the restrictiveness with which the barriers are enforced, baseline values of the $P^{ntb}_{k(i)}$ might be endogenously determined in the model. However, given only limited information about the coverage of imports affected by nontariff barriers and the degree of their restrictiveness, the model takes a simpler approach to determining each $P^{ntb}_{k(i)}$. Specifically, nontariff barriers are assumed to be highly restrictive (akin to import quotas), and the domestic price of imports covered by nontariff barriers is assumed to differ from the baseline price of similar imports not covered by nontariff barriers by a constant *a priori* proportional margin:

²⁰ WTSM does not explicitly differentiate between demands for intermediate and final goods in production and consumption. If produced inputs to production are considered Leontief-type goods, that is, goods demanded strictly in fixed proportion to output in each sector, then the model should be interpreted as implicitly assuming that demands for intermediate goods are satisfied solely by domestic producers of import-competing goods. Alternatively, if demands for Leontief-type intermediate goods were assumed satisfied mainly by producers of traded goods abroad, then more complete specification of the model would incorporate import demand equations of the form:

$$(1') \quad M^d_{k(i)} = c^m_{k(i)} \{ [P^m_{k(i)} - \sum_j (a_{jk(i)} P^m_{j(i)})]^{\eta_{k(i)}} + \sum_j [a_{kj(i)} (X^s_{j(i)} - M^d_{j(i)})] \}$$

where $X^s_{j(i)}$ is the supply of exports of the j th good in country i .

$$P_{k(i)}^{nth} = (1 + \gamma_{k(i)}) [P_k^* (1 + t_{k(i)}) / e_{(i)}]$$

where $\gamma_{k(i)}$ is the constant margin by which the price of imports covered by nontariff barriers differs from the baseline price of imports not covered by nontariff barriers in category k in country i , and where the other variables in the equation are evaluated at their baseline values (indicated by bold italics). Note that the parameter $\gamma_{k(i)}$ may be either positive or negative in value, depending upon the precise character of the "similar" goods in category k , the nature of the nontariff barrier, and the precise magnitude of the tariff rate (the tariff rate itself may be prohibitive). In the absence of reliable information about domestic prices for the large number of countries in the model, zero is assumed to be an appropriate, "neutral" value for this parameter for all countries and all categories of traded goods.

Export Supply

Export supply ($X_{k(i)}^s$) of good k in each country i is given by the relationship:

$$(2) \quad X_{k(i)}^s = c_{k(i)}^x [P_{k(i)}^x - \sum_j (a_{jk(i)} P_{j(i)}^m)]^{\alpha_{k(i)}}$$

where

$$P_{k(i)}^x = P_k^* / e_{(i)},$$

and where $\alpha_{k(i)}$ is the own-price elasticity of export supply of good k in country i . Equation (2) states that export supply is a positive function of the world price of good k and the elasticity of export supply, and a negative function of the price of intermediate goods used to produce good k and the U.S. dollar exchange rate for the currency of country i . Analogously as in the specification of import demand above, equation (2) also states that export supply is a positive function of the (imputed) domestic price of value-added in each sector.

World Market Equilibrium

As mentioned at the outset of this section, all countries in the model are assumed to be "price-takers" in international markets. Thus, the world price of good k expressed in U.S. dollars, P_k^* , is largely

determined independently of the behavior of consumers and producers in any single country, or any small group of countries. Specifically, each world price P_k^* is determined by the world market-clearing condition:

$$(3) \quad \sum_j M_{k(i)}^d = \sum_j X_{k(i)}^s .$$

That each country i may simultaneously import and export goods in the same traded goods category is assumed to reflect problems of aggregation or the influence of transportation costs for like goods imported and exported from widely separated customs ports in the same country, rather than a departure from the model's underlying assumption of trade in homogeneous (i.e., undifferentiated) goods.²¹

International Payments Equilibrium

Net earnings from trade in services and long-term international resource flows to finance trade imbalances are exogenous in the model. Thus, the condition for balance-of-payments equilibrium for each country i is given by

$$(4) \quad \sum_j (P_k^* X_{k(i)}^s - P_k^* M_{k(i)}^d) + K_{(i)}^* = 0$$

where $K_{(i)}^*$ is the sum of net services exports and net financial inflows from abroad, denominated in U.S. dollars. (If country i is in trade surplus, then $K_{(i)}^*$ is the sum of net services imports and net financial outflows to finance trade imbalances in other countries.)

The balance-of-payments condition in equation (4) is essential for "closure" of the model. With other equations in the model, the balance-of-payments condition also serves to determine the real exchange rate of each country.

²¹ The case of U.S. petroleum exported from Alaska to Japan, while Eastern U.S. ports import petroleum from the Middle East, is a prime example. A popular alternative approach to accounting for "two-way trade" in world trade models is to incorporate the assumption of differentiated demands for similar products produced in different countries.

Table 1. Economic Indicators for Middle East and North Africa (MENA) Countries, 2000

Country	Population (Mill.)	Per Capita GDP			International Trade and Foreign Investment					
		Level (US \$)	Avg. Annual Growth 1990-2000 (Percent)	Structure of Output			Merch. Exports (US \$ Mill.)	Merch. Imports (US \$ Mill.)	Average Import Tariff (Percent)	Foreign Direct Investment (Percent GDP)
				Agriculture	Industry	Services				
				(Percent GDP)						
Algeria	30.4	1,758	-0.1	8.8	59.7	31.5	22,031	9,152	8.3	..
Bahrain	0.6	13,284	2.2	..	..	..	5,703	4,633	16.3	11.6
Egypt	64.0	1,554	2.6	16.7	33.1	50.2	4,689	14,010	20.1	1.3
Iran	63.7	1,594	1.2	17.7	33.3	49.0	28,345	14,296	6.6	0.0
Iraq	23.3	..	..	2.2	24.8	73.0	20,603	11,153	14.3	..
Israel	6.2	17,804	2.0	..	..	..	31,404	37,686	6.5	6.7
Jordan	4.9	1,728	0.7	11.9	22.0	66.1	1,897	4,539	16.9	9.4
Kuwait	2.0	17,915	6.5	..	..	..	19,420	7,157	3.4	0.9
Lebanon	4.3	3,834	3.3	13.5	32.2	54.3	715	6,230	7.4	..
Libya	5.3	6,441	..	..	..	..	12,687	3,751	13.3	1.5
Morocco	28.7	1,161	0.4	..	..	..	7,432	11,534	35.8	0.4
Oman	2.4	8,278	..	22.8	28.7	48.5	10,852	5,040	9.6	1.0
Qatar	0.6	27,424	..	12.3	28.8	58.9	11,594	3,252	4.4	1.5
Saudi Arabia	20.7	9,117	-1.2	15.4	25.3	59.4	77,583	30,238	11.5	3.9
Syria	16.2	1,105	3.1	..	..	..	4,634	3,815	14.5	0.9
Tunisia	9.6	2,027	3.1	14.0	47.9	38.0	5,850	8,567	36.2	2.2
Turkey	67.4	2,956	1.2	8.8	59.7	31.5	27,485	54,150	9.7	..
UAE	2.9	..	0.2	..	..	..	41,262	38,139	14.3	11.6
Yemen	17.5	531	1.1	16.7	33.1	50.2	4,079	2,324	14.9	1.3
<u>Memorandum Items:</u>										
GCC	29.2	11,472	0.1	13.2	21.6	48.9	166,414	88,459	9.9	3.4
MENA	370.7	6,635	1.1	10.3	30.4	34.7	338,265	269,666	13.9	2.0
Dev. Ctrys.	5,099.7	1,200	3.0	12.2	34.6	53.2	1,565,387	1,444,005	..	3.6
World	6,052.8	5,204	1.2	3.9	29.8	66.3	6,430,630	6,633,562	..	9.0

Sources: UNCTAD, *Handbook of Statistics*, 2003; UNCTAD, *Trade Information and Analysis System*, 2003; and World Bank, *World Development Indicators*, 2003.

Notes: GCC denotes Gulf Cooperation Council countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE).

Table 2. Trade in Services, 2000

Country	Exports				Imports			
	Total	Of which			Total	Of which		
		Transp.	Travel	Other		Transp.	Travel	Other
	(\$ Mn)	(Percent)			(\$ Mn)	(Percent)		
Algeria	..	..	..	..	..	..	..	..
Bahrain	830	33.9	56.6	9.5	683	60.9	24.8	14.3
Egypt	9,803	27.0	44.3	28.7	7,513	29.4	14.3	56.3
Iran	1,382	48.6	36.3	15.2	2,296	49.7	8.9	41.3
Iraq	..	..	..	..	..	..	..	..
Israel	15,181	16.3	25.4	58.2	12,529	39.0	22.4	38.6
Jordan	..	..	..	..	..	..	..	..
Kuwait	1,822	75.9	5.4	18.8	4,923	31.3	50.7	18.1
Lebanon	..	..	..	..	..	..	..	..
Libya	..	..	..	..	..	..	..	..
Morocco	3,034	16.0	67.2	16.8	1,884	32.9	22.6	44.5
Oman	283	6.4	78.0	15.6	1,501	32.4	22.7	44.9
Qatar	..	..	..	..	..	..	..	..
Saudi Arabia	4,785	..	..	100.0	25,262	8.9	..	91.1
Syria	1,700	14.5	63.6	21.9	1,667	41.9	40.1	18.0
Tunisia	2,767	21.5	60.8	17.7	1,219	44.9	21.5	33.6
Turkey	19,484	15.2	39.2	45.6	8,149	33.7	21.0	45.3
UAE	..	..	..	..	..	..	..	..
Yemen	211	10.2	34.5	55.3	809	42.0	8.6	49.4

Source: UNCTAD, *Handbook of Statistics*, 2003.

Table 3. Directions of Merchandise Trade, 2000

Country	Exports to					Imports from				
	Developed Countries	Of which		Developing Countries	Of which Middle East	Developed Countries	Of which		Developing Countries	Of which Middle East
		EU	US				EU	US		
(Percent)										
Algeria	83.6	66.3	16.3	15.9	5.3	77.6	61.3	13.2	16.6	6.2
Bahrain	12.0	4.6	4.0	28.6	5.5	45.9	25.4	12.9	53.5	34.9
Egypt	64.6	48.2	13.5	24.5	9.8	62.1	36.6	17.6	25.7	7.0
Iran	44.6	25.6	0.9	42.7	10.4	44.3	32.3	3.1	37.7	7.9
Iraq	84.0	35.0	44.2	16.0	4.4	61.8	41.1	2.5	31.0	7.2
Israel	70.5	26.8	37.7	21.1	2.0	70.9	42.0	19.0	13.8	1.8
Jordan	16.4	3.9	5.0	80.8	39.4	51.4	31.6	10.8	44.3	24.9
Kuwait	55.7	14.5	15.1	44.3	2.2	73.7	40.8	15.9	25.3	4.1
Lebanon	37.8	19.9	7.9	60.6	44.7	63.0	44.0	7.8	28.2	12.7
Libya	88.5	85.3	0.0	11.5	6.0	68.7	62.2	0.9	29.4	6.1
Morocco	73.9	62.1	5.9	16.5	2.2	72.0	63.0	6.1	14.5	4.2
Oman	23.4	1.7	2.5	76.6	11.5	45.1	21.2	4.3	54.6	38.7
Qatar	51.0	0.9	3.7	39.2	6.2	62.1	35.6	11.2	37.7	17.6
Saudi Arabia	56.1	17.6	18.1	43.9	6.9	66.8	30.1	20.2	20.5	5.0
Syria	65.1	61.0	3.7	31.3	25.4	41.2	32.9	4.5	32.0	10.1
Tunisia	80.4	78.2	0.8	15.3	3.4	78.9	70.6	4.9	16.5	3.7
Turkey	66.9	49.9	11.9	17.8	5.6	60.4	45.8	7.6	21.1	4.8
UAE	42.4	4.9	2.4	44.1	9.0	48.8	31.3	6.8	48.7	14.8
Yemen	13.0	1.2	6.2	84.3	4.1	33.5	18.0	4.7	63.1	35.2

Sources: UNCTAD, *Handbook of Statistics*, 2003.

Table 4. Structure of Merchandise Trade, 2000

Country	Exports					Imports				
	Foods	Ag. Raw Materials	Fuels	Ores & Metals	Manu- factures	Foods	Ag. Raw Materials	Fuels	Ores & Metals	Manu- factures
(Percent)										
Algeria	0.2	0.0	98.1	0.3	1.4	28.2	2.6	1.4	1.2	66.6
Bahrain	0.7	0.0	71.0	17.6	10.7	9.7	0.8	45.7	6.8	37.0
Egypt 1/	8.9	7.9	36.9	4.4	37.1	22.8	4.4	6.1	3.0	58.8
Iran	2.9	0.4	88.6	0.8	7.1	19.0	2.6	2.4	2.5	73.2
Iraq	..	..	..	..	..	..	..	..	..	..
Israel	2.6	1.1	0.7	1.2	94.2	5.4	1.0	10.1	1.8	81.2
Jordan	15.9	0.5	0.0	14.6	69.0	21.2	2.3	4.8	2.5	65.9
Kuwait 1/	0.5	0.1	90.6	0.3	8.5	16.8	0.9	0.6	1.9	78.2
Lebanon	18.4	1.8	0.2	6.9	66.0	17.8	1.7	16.5	2.1	56.0
Libya	..	..	..	..	..	..	..	..	..	..
Morocco	21.5	2.0	3.7	8.7	64.1	13.7	3.1	17.7	2.5	62.9
Oman	3.6	0.0	82.5	0.9	12.4	22.2	0.7	1.7	3.0	68.7
Qatar 1/	0.1	0.0	90.1	0.1	9.7	15.3	0.7	0.6	3.2	79.9
Saudi Arabia	0.6	0.1	92.1	0.1	7.1	17.7	1.0	0.2	3.0	73.2
Syria	8.8	4.6	76.3	0.7	7.8	19.0	3.3	3.7	1.8	64.7
Tunisia	8.7	0.7	12.1	1.5	77.0	8.2	3.0	10.6	2.5	75.4
Turkey	12.8	1.1	1.1	2.6	81.2	3.9	3.7	14.0	4.0	70.5
UAE	..	..	..	..	..	..	..	..	..	..
Yemen	..	..	..	..	..	..	..	..	..	..

Sources: UNCTAD, *Handbook of Statistics*, 2003.

1/ 1999.

**Table 5. The MENA Trade Simulation Model:
Country and Product Coverage**

Countries, Product Categories		Model Code
<u>Countries</u>		
1	Algeria	AL
2	Bahrain	BH
3	Egypt	EG
4	Iran	IR
5	Iraq	IQ
6	Israel	IS
7	Jordan	JO
8	Kuwait	KW
9	Lebanon	LN
10	Libya	LY
11	Morocco	MO
12	Oman	OM
13	Qatar	QA
14	Saudi Arabia	SA
15	Syria	SY
16	Tunisia	TN
17	Turkey	TR
18	United Arab Emirates	UA
19	Yemen	YE
20	EU15	EU
21	Japan	JP
22	United States	US
23	Other Developed Countries	OD
24	Other Less Developed Countries	OL
<u>HS Sections</u>		
I	Live animals and animal products	AN
II	Vegetable products	VE
III	Fats and oils	FA
IV	Manufactured foodstuffs	FS
V	Mineral products	MN
VI	Chemical	CH
VII	Rubber and plastics	RP
VIII	Hides and leather products	HL
IX	Cork and wood articles	CW
X	Pulp and paper products	PP
XI	Textiles and apparel	TA
XII	Footwear and other made-up articles	FW
XIII	Stone and mineral products	SP
XIV	Precious stones and jewellery	PS
XV	Base metals and metal products	MT
XVI	Machinery	MA
XVII	Transport equipment	TE
XVIII	Professional equipment	PE
XIX	Arms and ammunition	AA
XX	Miscellaneous manufactures	MM
XXI	Works of art	WA

Table 6. Average MFN Import Tariff Rates (Percent)

HS Section	Algeria	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Libya	Morocco
Live animals & animal products	4.9	16.0	13.6	4.6	19.5	3.0	13.6	0.8	8.3	2.0	80.7
Vegetable products	4.4	14.7	14.8	4.4	16.3	6.8	15.9	0.9	12.6	9.7	39.5
Fats & oils	7.3	26.3	13.7	5.2	13.8	3.4	15.6	0.0	10.9	12.1	31.8
Manufactured foodstuffs	23.4	23.3	28.9	9.3	25.0	9.4	35.0	8.9	13.9	24.3	42.8
Mineral products	5.1	5.8	7.0	3.3	8.4	0.9	11.2	4.0	6.2	10.8	22.3
Chemical	5.6	17.4	16.9	2.5	11.3	7.4	10.9	4.0	5.5	15.2	27.7
Rubber & plastics	7.6	18.1	18.0	6.3	13.5	6.6	15.1	4.0	4.2	21.0	40.8
Hides & leather products	9.6	0.0	21.6	11.2	13.4	4.4	21.7	2.7	16.5	8.8	40.5
Cork & wood articles	7.7	9.8	21.5	10.2	13.2	9.7	14.0	4.0	3.6	3.3	42.3
Pulp & paper products	4.9	16.0	14.2	3.4	10.9	4.5	14.1	3.4	5.3	9.2	33.9
Textiles & apparel	9.8	18.0	22.8	12.0	15.7	15.8	13.8	4.0	2.6	9.1	38.2
Footwear & other made-up articles	10.0	21.6	39.5	11.7	17.9	9.4	28.2	3.0	12.9	1.3	42.2
Stone & mineral products	6.3	22.3	28.2	9.2	16.9	7.9	23.6	4.0	9.4	20.0	38.6
Precious stones & jewellery	9.1	30.0	26.7	0.0	15.5	3.5	18.1	4.0	3.6	35.0	36.7
Base metals & metal products	5.4	11.7	17.7	4.9	11.1	4.1	14.3	3.6	3.6	7.4	31.3
Machinery	9.3	14.2	14.9	6.2	11.1	6.2	13.2	4.0	4.2	20.9	15.9
Transport equipment	10.9	8.5	14.2	4.8	10.6	1.8	9.9	4.0	3.4	15.9	17.1
Professional equipment	9.8	13.1	19.5	5.7	13.1	7.0	21.1	4.0	4.9	20.7	14.4
Arms & ammunition	6.0	15.0	23.6	10.0	11.7	0.0	0.0	0.0	5.0	0.0	47.9
Miscellaneous manufactures	8.7	30.0	24.6	10.7	18.4	14.1	26.5	4.0	11.1	20.8	34.3
Works of art	8.1	10.6	20.3	3.5	13.7	11.0	19.5	3.7	7.8	13.1	33.2
All Products	8.3	16.3	20.1	6.6	14.3	6.5	16.9	3.4	7.4	13.3	35.8
	Oman	Qatar	S. Arabia	Syria	Tunisia	Turkey	UAE	Yemen	EU15	Japan	US
Live animals & animal products	10.1	4.0	9.5	6.3	69.9	50.4	19.5	17.7	4.4	9.8	3.7
Vegetable products	5.1	4.0	11.2	5.6	77.7	25.7	16.3	14.3	5.1	6.7	3.6
Fats & oils	5.7	4.0	12.0	9.0	40.5	14.7	13.8	12.7	5.3	6.6	3.4
Manufactured foodstuffs	26.0	11.3	10.7	28.1	62.0	36.0	25.0	16.0	13.0	15.0	26.9
Mineral products	5.0	4.0	12.1	5.4	19.3	0.3	8.4	11.9	0.3	0.3	0.1
Chemical	7.3	4.0	11.4	11.0	25.8	4.9	11.3	10.4	4.2	3.4	2.2
Rubber & plastics	6.2	4.0	12.1	13.6	27.4	4.8	13.5	13.2	4.7	3.0	3.2
Hides & leather products	11.7	4.0	12.1	0.0	37.8	5.3	13.4	11.4	2.4	15.3	3.7
Cork & wood articles	8.5	4.0	12.3	13.8	35.6	2.9	13.2	18.5	2.8	3.2	1.8
Pulp & paper products	4.2	4.0	11.2	11.0	26.6	2.0	10.9	11.3	1.3	0.8	0.2
Textiles & apparel	8.3	4.0	12.4	32.9	33.0	18.9	15.7	11.5	7.5	7.8	7.3
Footwear & other made-up articles	11.9	4.0	12.0	18.8	40.9	7.1	17.9	21.5	5.2	10.8	5.7
Stone & mineral products	7.8	4.0	12.2	30.9	32.7	4.3	16.9	17.2	3.6	1.6	3.6
Precious stones & jewellery	14.4	4.0	11.6	1.0	38.3	0.7	15.5	14.7	0.7	1.2	2.2
Base metals & metal products	6.2	4.2	12.5	8.4	27.7	3.4	11.1	15.2	2.8	3.1	2.3
Machinery	8.1	4.0	12.0	16.8	20.5	2.3	11.1	11.5	2.2	0.1	1.5
Transport equipment	6.6	4.0	10.1	20.0	21.7	2.7	10.6	16.3	2.7	0.0	2.2
Professional equipment	12.2	4.0	11.5	23.2	30.8	3.1	13.1	12.1	3.1	0.2	2.8
Arms & ammunition	15.0	4.0	7.1	0.0	25.4	2.6	11.7	25.0	2.7	9.6	0.9
Miscellaneous manufactures	12.4	4.0	13.7	31.9	38.8	4.7	18.4	17.4	2.7	2.5	2.6
Works of art	9.0	4.2	12.1	16.7	27.8	6.3	13.7	13.5	3.0	3.0	2.6
All Products	9.6	4.4	11.5	14.5	36.2	9.7	14.3	14.9	3.8	5.0	3.9

Source: UNCTAD, *Trade Information and Analysis System*, 2003.

Notes: Values are based on latest available tariff rates for each country. Average tariff rates for other countries are average values for developed or developing countries, as appropriate

Table 7. Price Elasticities of Import Demand and Export Supply

HS Section		Import Demand	Export Supply
I	Live animals & animal products	-0.93	0.75
II	Vegetable products	-0.68	0.75
III	Fats & oils	-1.10	0.75
IV	Manufactured foodstuffs	-1.08	0.75
V	Mineral products	-0.81	0.50
VI	Chemical	-1.59	1.00
VII	Rubber & plastics	-1.60	1.00
VIII	Hides & leather products	-1.32	1.00
IX	Cork & wood articles	-1.18	1.00
X	Pulp & paper products	-1.35	1.00
XI	Textiles & apparel	-1.53	1.00
XII	Footwear & other made-up articles	-1.88	1.00
XIII	Stone & mineral products	-2.03	1.00
XIV	Precious stones & jewellery	-2.25	1.00
XV	Base metals & metal products	-2.09	1.00
XVI	Machinery	-2.63	1.00
XVII	Transport equipment	-2.50	1.00
XVIII	Professional equipment	-2.10	1.00
XIX	Arms & ammunition	-0.80	1.00
XX	Miscellaneous manufactures	-1.38	1.00
XXI	Works of art	-1.00	1.00

Sources: Based on econometric estimates compiled by Stern et al. (1976), Goldstein and Khan (1985), and Republic of Uganda (1997).

Note: Elasticity estimates are averages computed from elasticity values by HS chapters.

Table 8. EU-GCC Trade Liberalization Scenarios

Scenario	Notes	Internationally Competitive Sectors
<u>GCC Customs Union</u>		
1. GCC Customs Union [CU (5% CET)]	GCC members adopt a common external tariff set at 5 percent in each commodity category.	Mineral products
2. GCC Customs Union [CU (Min CET)]	GCC members adopt a common external tariff set at the minimum tariff level in each commodity category, across member countries.	Mineral products
<u>EU-GCC FTA</u>		
3. EU-GCC FTA [FTA (5% CET)]	GCC countries maintain 5 percent common external tariff in Scenario 1.	Manuf. foodstuffs Mineral products Chemicals Rubber and plastics Pulp, paper prods. Stone, mineral prods. Metals, metal prods. Machinery Transport equipment Arms, ammunition Works of art
4. EU-GCC FTA [FTA (Min CET)]	GCC countries maintain common external tariff in Scenario 2.	Manuf. foodstuffs Mineral products Chemicals Rubber and plastics Pulp, paper prods. Stone, mineral prods. Metals, metal prods. Machinery Transport equipment Arms, ammunition Works of art
<u>Open Regionalism</u>		
5. MFN-based EU-GCC FTA (MFN)	EU and GCC jointly pursue free trade on an MFN basis.	Not applicable

Notes: EU denotes European Union 15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom. GCC denotes Gulf Cooperation Council countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates. In each of the trade liberalization scenarios, countries are assumed additionally to eliminate nontariff barriers, which are not explicitly represented in the MENA trade simulation model.

Table 9. GCC Countries: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-4.8	-4.2	-6.4	-6.5	-7.4
<u>Change in Real Exports</u>					
Agriculture	65.3	34.1	69.1	62.3	53.3
Minerals	2,282.8	1,946.4	3,120.9	3,166.4	3,404.5
Manufacturing	1,161.1	972.7	888.8	917.1	932.1
All products	3,509.2	2,953.2	4,078.8	4,145.8	4,389.9
(% Change)	2.9	2.4	3.3	3.4	3.6
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	54.1	453.6	19.0	257.9	212.7
Minerals	36.8	46.6	-2.4	-5.0	-14.5
Manufacturing	197.3	2,097.3	2,962.4	2,788.3	2,804.9
All products	288.2	2,597.5	2,979.0	3,041.2	3,003.1
(% Change)	0.4	3.5	4.0	4.1	4.1
<u>Trade Diversion</u>					
Agriculture	41.4	20.8	1,305.5	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	785.4	656.9	4,310.1	4,132.6	0.0
All products	826.8	677.7	5,615.6	4,132.6	0.0
(% Imports)	1.1	0.9	7.6	5.6	0.0
<u>Net Trade Creation</u>					
Agriculture	12.7	432.8	-1,286.4	257.9	212.7
Minerals	36.8	46.6	-2.4	-5.0	-14.5
Manufacturing	-588.1	1,440.3	-1,347.8	-1,344.4	2,804.9
All products	-538.6	1,919.8	-2,636.6	-1,091.4	3,003.1
(% Imports)	-0.7	2.6	-3.6	-1.5	4.1
<u>Change in Consumer Surplus</u>					
Agriculture	4.7	19.2	1.9	9.0	5.5
Minerals	0.9	1.0	0.5	0.5	0.6
Manufacturing	70.6	139.6	80.6	74.8	79.4
All products	76.2	159.8	83.1	84.3	85.6
(% GDP)	0.0	0.1	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	92.1	47.0	97.8	87.7	74.5
Minerals	4,696.8	3,992.3	6,451.6	6,549.7	7,055.9
Manufacturing	1,236.3	1,034.9	945.6	980.3	987.3
All products	6,025.2	5,074.1	7,494.9	7,617.8	8,117.8
(% GDP)	2.0	1.7	2.5	2.5	2.7
<u>Forgone Tariff Revenue</u>					
Agriculture	29.0	4.0	159.4	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	448.8	365.6	388.1	716.3	0.0
All products	477.9	369.6	547.6	716.3	0.0
(% GDP)	0.2	0.1	0.2	0.2	0.0
<u>Change in Economic Welfare</u>					
Agriculture	67.8	62.1	-59.7	96.7	80.0
Minerals	4,697.6	3,993.3	6,452.1	6,550.2	7,056.6
Manufacturing	858.0	808.9	638.1	338.8	1,066.7
All products	5,623.5	4,864.3	7,030.4	6,985.8	8,203.3
(% GDP)	1.9	1.6	2.3	2.3	2.7
<u>Change in Tariff Revenue</u>					
Agriculture	-780.4	-1,146.3	-921.0	-1,142.1	-1,213.4
Minerals	-200.1	-200.1	-200.1	-200.1	-200.1
Manufacturing	-4,864.9	-5,009.1	-6,999.3	-7,061.3	-7,296.3
All products	-5,845.3	-6,355.5	-8,120.5	-8,403.5	-8,709.7
(% GDP)	-1.9	-2.1	-2.7	-2.8	-2.9

Source: MENA trade simulation model, November 6, 2003.

Table 10. European Union: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	0.0	0.0	0.3	0.2	-1.9
<u>Change in Real Exports</u>					
Agriculture	7.5	70.0	2,760.6	2,098.9	1,742.5
Minerals	-125.8	-125.0	-347.0	-320.4	352.2
Manufacturing	99.6	38.8	12,991.7	15,480.2	40,805.3
All products	-18.7	-16.2	15,405.3	17,258.8	42,900.0
(% Change)	0.0	0.0	0.7	0.8	2.0
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	-8.7	-88.7	1,120.1	1,974.0	2,360.3
Minerals	460.8	457.8	1,446.3	1,311.6	-887.8
Manufacturing	-165.3	-83.3	21,986.3	20,613.4	42,256.3
All products	286.8	285.8	24,552.6	23,899.0	43,728.8
(% Change)	0.0	0.0	1.1	1.1	2.0
<u>Trade Diversion</u>					
Agriculture	0.0	0.0	33.5	62.3	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	196.9	210.0	0.0
All products	0.0	0.0	230.4	272.3	0.0
(% Imports)	0.0	0.0	0.0	0.0	0.0
<u>Net Trade Creation</u>					
Agriculture	-8.7	-88.7	1,086.6	1,911.6	2,360.3
Minerals	460.8	457.8	1,446.3	1,311.6	-887.8
Manufacturing	-165.3	-83.3	21,789.4	20,403.5	42,256.3
All products	286.8	285.8	24,322.2	23,626.7	43,728.8
(% Imports)	0.0	0.0	1.1	1.1	2.0
<u>Change in Consumer Surplus</u>					
Agriculture	-0.4	-4.2	31.0	22.9	29.5
Minerals	0.7	0.7	7.0	5.7	2.8
Manufacturing	-18.7	-9.2	363.7	239.2	630.2
All products	-18.4	-12.7	401.6	267.8	662.5
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	10.0	93.3	3,747.1	2,840.7	2,349.5
Minerals	-251.2	-249.6	-691.1	-638.2	707.6
Manufacturing	134.6	58.5	14,476.2	17,603.6	42,335.4
All products	-106.5	-97.7	17,532.2	19,806.2	45,392.6
(% GDP)	0.0	0.0	0.2	0.3	0.6
<u>Forgone Tariff Revenue</u>					
Agriculture	0.0	0.0	19.6	22.2	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	106.9	135.0	0.0
All products	0.0	0.0	126.5	157.2	0.0
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Economic Welfare</u>					
Agriculture	9.6	89.1	3,758.4	2,841.4	2,379.1
Minerals	-250.5	-248.9	-684.1	-632.4	710.4
Manufacturing	116.0	49.3	14,733.0	17,707.8	42,965.6
All products	-124.9	-110.4	17,807.4	19,916.8	46,055.0
(% GDP)	0.0	0.0	0.2	0.3	0.6
<u>Change in Tariff Revenue</u>					
Agriculture	-0.1	0.6	-16.4	43.2	-5,654.7
Minerals	-491.1	-491.1	-491.1	-491.1	-491.1
Manufacturing	-3.8	-3.4	-37,418.0	-37,991.0	-66,062.0
All products	-495.0	-493.9	-37,925.5	-38,438.9	-72,207.8
(% GDP)	0.0	0.0	-0.5	-0.5	-0.9

Source: MENA trade simulation model, November 6, 2003.

Table 11. Bahrain: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-5.1	-4.9	-6.8	-6.8	-7.9
<u>Change in Real Exports</u>					
Agriculture	1.5	0.8	1.6	1.3	1.2
Minerals	106.7	102.4	139.9	141.4	155.8
Manufacturing	157.7	136.0	135.8	137.1	130.9
All products	265.9	239.3	277.2	279.8	287.9
(% Change)	4.6	4.1	4.8	4.8	5.0
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	11.5	22.0	9.9	17.3	15.5
Minerals	11.8	14.9	-14.3	-15.8	-23.1
Manufacturing	183.6	229.5	277.7	274.7	263.7
All products	206.9	266.4	273.3	276.2	256.0
(% Change)	4.7	6.0	6.1	6.2	5.8
<u>Trade Diversion</u>					
Agriculture	2.0	1.0	51.4	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	54.6	45.1	140.4	137.5	0.0
All products	56.6	46.1	191.7	137.5	0.0
(% Imports)	1.3	1.0	4.3	3.1	0.0
<u>Net Trade Creation</u>					
Agriculture	9.5	20.9	-41.5	17.3	15.5
Minerals	11.8	14.9	-14.3	-15.8	-23.1
Manufacturing	129.1	184.4	137.3	137.2	263.7
All products	150.3	220.3	81.5	138.8	256.0
(% Imports)	3.4	5.0	1.8	3.1	5.8
<u>Change in Consumer Surplus</u>					
Agriculture	0.9	1.3	0.5	0.9	0.6
Minerals	0.0	0.1	0.1	0.1	0.2
Manufacturing	14.9	17.3	14.1	13.6	12.1
All products	15.8	18.7	14.7	14.6	12.9
(% GDP)	0.2	0.2	0.2	0.2	0.2
<u>Change in Producer Surplus</u>					
Agriculture	2.0	1.1	2.2	1.9	1.7
Minerals	218.9	209.8	289.1	292.2	323.1
Manufacturing	166.6	143.0	143.3	144.8	137.2
All products	387.5	353.9	434.5	438.9	462.0
(% GDP)	4.9	4.4	5.5	5.5	5.8
<u>Forgone Tariff Revenue</u>					
Agriculture	1.4	0.2	6.2	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	30.4	24.3	12.3	22.5	0.0
All products	31.8	24.5	18.5	22.5	0.0
(% GDP)	0.4	0.3	0.2	0.3	0.0
<u>Change in Economic Welfare</u>					
Agriculture	1.6	2.2	-3.5	2.7	2.3
Minerals	218.9	209.9	289.1	292.3	323.3
Manufacturing	151.0	136.0	145.1	136.0	149.4
All products	371.5	348.1	430.7	431.0	475.0
(% GDP)	4.7	4.4	5.4	5.4	6.0
<u>Change in Tariff Revenue</u>					
Agriculture	-32.0	-43.4	-37.8	-43.2	-45.7
Minerals	-114.2	-114.2	-114.2	-114.2	-114.2
Manufacturing	-270.4	-276.8	-341.6	-344.4	-355.6
All products	-416.7	-434.4	-493.6	-501.8	-515.5
(% GDP)	-5.2	-5.4	-6.2	-6.3	-6.5

Source: MENA trade simulation model, November 6, 2003.

Table 12. Kuwait: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-0.8	-0.3	-2.6	-2.6	-3.4
<u>Change in Real Exports</u>					
Agriculture	0.4	0.1	0.5	0.4	0.3
Minerals	31.8	-2.7	132.0	133.9	158.1
Manufacturing	37.5	27.2	21.1	22.2	23.8
All products	69.7	24.6	153.6	156.5	182.2
(% Change)	0.5	0.2	1.1	1.1	1.3
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	-13.7	-1.0	-15.4	-7.5	-8.4
Minerals	1.4	1.7	0.7	0.7	0.6
Manufacturing	-147.5	-23.7	63.5	64.8	40.0
All products	-159.8	-23.1	48.8	57.9	32.2
(% Change)	-3.4	-0.5	1.0	1.2	0.7
<u>Trade Diversion</u>					
Agriculture	2.4	1.2	66.4	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	70.4	58.4	334.7	318.0	0.0
All products	72.8	59.7	401.2	318.0	0.0
(% Imports)	1.6	1.3	8.6	6.8	0.0
<u>Net Trade Creation</u>					
Agriculture	-16.1	-2.3	-81.9	-7.5	-8.4
Minerals	1.4	1.7	0.7	0.7	0.6
Manufacturing	-218.0	-82.1	-271.2	-253.2	40.0
All products	-232.7	-82.7	-352.4	-260.0	32.2
(% Imports)	-5.0	-1.8	-7.6	-5.6	0.7
<u>Change in Consumer Surplus</u>					
Agriculture	-0.3	0.0	0.1	0.1	0.1
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	-4.4	-0.8	0.0	0.3	0.2
All products	-4.6	-0.8	0.2	0.4	0.3
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	0.6	0.1	0.6	0.5	0.4
Minerals	63.8	-5.4	266.8	270.6	320.1
Manufacturing	38.6	27.9	21.6	22.8	24.3
All products	103.0	22.6	288.9	293.9	344.8
(% GDP)	0.3	0.1	0.8	0.8	0.9
<u>Forgone Tariff Revenue</u>					
Agriculture	1.6	0.2	8.1	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	38.4	30.3	20.0	31.5	0.0
All products	40.1	30.5	28.1	31.5	0.0
(% GDP)	0.1	0.1	0.1	0.1	0.0
<u>Change in Economic Welfare</u>					
Agriculture	-1.3	-0.1	-7.3	0.6	0.5
Minerals	63.8	-5.3	266.8	270.6	320.1
Manufacturing	-4.2	-3.3	1.6	-8.4	24.5
All products	58.3	-8.7	261.1	262.8	345.1
(% GDP)	0.2	0.0	0.7	0.7	0.9
<u>Change in Tariff Revenue</u>					
Agriculture	11.7	-0.2	4.1	-0.1	-2.5
Minerals	-2.0	-2.0	-2.0	-2.0	-2.0
Manufacturing	-14.0	-34.0	-160.3	-164.2	-179.0
All products	-4.3	-36.3	-158.2	-166.3	-183.6
(% GDP)	0.0	-0.1	-0.4	-0.4	-0.5

Source: MENA trade simulation model, November 6, 2003.

Table 13. Oman: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-2.9	-2.2	-5.0	-4.9	-5.8
<u>Change in Real Exports</u>					
Agriculture	13.3	5.1	15.1	13.1	10.7
Minerals	102.1	75.7	177.0	178.0	195.9
Manufacturing	128.4	109.2	106.0	110.5	104.5
All products	243.8	190.0	298.1	301.7	311.1
(% Change)	2.5	2.0	3.1	3.1	3.2
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	-1.3	22.8	-6.4	8.5	6.1
Minerals	3.8	4.9	0.4	0.3	-0.2
Manufacturing	65.3	185.1	238.6	227.9	209.9
All products	67.8	212.8	232.6	236.7	215.9
(% Change)	1.3	4.1	4.5	4.6	4.2
<u>Trade Diversion</u>					
Agriculture	3.4	1.9	104.9	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	64.8	54.2	363.8	364.6	0.0
All products	68.2	56.0	468.6	364.6	0.0
(% Imports)	1.3	1.1	9.1	7.1	0.0
<u>Net Trade Creation</u>					
Agriculture	-4.7	20.9	-111.3	8.5	6.1
Minerals	3.8	4.9	0.4	0.3	-0.2
Manufacturing	0.5	131.0	-125.1	-136.7	209.9
All products	-0.4	156.8	-236.0	-127.9	215.9
(% Imports)	0.0	3.0	-4.6	-2.5	4.2
<u>Change in Consumer Surplus</u>					
Agriculture	0.1	0.8	-0.2	0.2	0.2
Minerals	0.0	0.1	0.0	0.0	0.0
Manufacturing	13.4	17.8	8.3	6.6	9.6
All products	13.5	18.6	8.0	6.8	9.7
(% GDP)	0.1	0.1	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	18.5	7.0	21.0	18.2	14.7
Minerals	206.9	152.9	362.1	364.2	401.7
Manufacturing	138.9	120.6	117.2	124.0	114.0
All products	364.3	280.5	500.3	506.3	530.4
(% GDP)	1.8	1.4	2.5	2.6	2.7
<u>Forgone Tariff Revenue</u>					
Agriculture	2.1	0.3	12.8	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	35.8	28.7	32.5	65.0	0.0
All products	37.9	28.9	45.3	65.0	0.0
(% GDP)	0.2	0.1	0.2	0.3	0.0
<u>Change in Economic Welfare</u>					
Agriculture	16.5	7.5	8.0	18.4	14.9
Minerals	207.0	153.0	362.1	364.2	401.7
Manufacturing	116.6	109.7	92.9	65.5	123.6
All products	340.0	270.2	463.0	448.1	540.2
(% GDP)	1.7	1.4	2.3	2.3	2.7
<u>Change in Tariff Revenue</u>					
Agriculture	-18.1	-40.4	-30.0	-40.1	-44.6
Minerals	-10.3	-10.3	-10.3	-10.3	-10.3
Manufacturing	-261.5	-264.6	-428.2	-430.7	-439.5
All products	-289.9	-315.3	-468.5	-481.0	-494.4
(% GDP)	-1.5	-1.6	-2.4	-2.4	-2.5

Source: MENA trade simulation model, November 6, 2003.

Table 14. Qatar: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-0.6	-0.2	-2.6	-2.6	-3.4
<u>Change in Real Exports</u>					
Agriculture	0.2	0.0	0.2	0.2	0.1
Minerals	15.9	-4.7	101.8	102.7	120.5
Manufacturing	44.9	32.7	30.9	32.0	30.7
All products	61.0	28.0	133.0	134.9	151.4
(% Change)	0.6	0.3	1.2	1.3	1.4
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	-4.0	7.3	-6.1	1.3	0.4
Minerals	2.5	2.8	1.2	1.2	1.0
Manufacturing	-104.9	-7.2	67.7	69.2	41.5
All products	-106.5	2.9	62.8	71.7	42.9
(% Change)	-2.8	0.1	1.7	1.9	1.1
<u>Trade Diversion</u>					
Agriculture	2.1	1.1	58.0	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	59.4	49.0	235.2	228.9	0.0
All products	61.6	50.1	293.1	228.9	0.0
(% Imports)	1.6	1.3	7.8	6.1	0.0
<u>Net Trade Creation</u>					
Agriculture	-6.2	6.2	-64.1	1.3	0.4
Minerals	2.5	2.8	1.2	1.2	1.0
Manufacturing	-164.4	-56.2	-167.4	-159.8	41.5
All products	-168.0	-47.3	-230.3	-157.2	42.9
(% Imports)	-4.5	-1.3	-6.1	-4.2	1.1
<u>Change in Consumer Surplus</u>					
Agriculture	-0.1	0.2	-0.1	0.0	0.0
Minerals	0.0	0.1	0.0	0.0	0.0
Manufacturing	-3.2	-0.1	0.3	0.4	0.3
All products	-3.3	0.1	0.3	0.4	0.3
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	0.3	0.1	0.3	0.2	0.2
Minerals	31.8	-9.4	205.7	207.5	244.0
Manufacturing	46.2	33.4	31.8	32.9	31.3
All products	78.2	24.0	237.8	240.6	275.5
(% GDP)	0.5	0.2	1.6	1.7	1.9
<u>Forgone Tariff Revenue</u>					
Agriculture	1.5	0.2	7.0	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	31.5	24.3	13.1	19.1	0.0
All products	33.0	24.5	20.1	19.1	0.0
(% GDP)	0.2	0.2	0.1	0.1	0.0
<u>Change in Economic Welfare</u>					
Agriculture	-1.3	0.0	-6.8	0.3	0.2
Minerals	31.8	-9.4	205.8	207.5	244.0
Manufacturing	11.5	8.9	19.0	14.3	31.6
All products	42.0	-0.4	218.0	222.0	275.8
(% GDP)	0.3	0.0	1.5	1.5	1.9
<u>Change in Tariff Revenue</u>					
Agriculture	1.4	-10.0	-5.2	-9.8	-12.3
Minerals	-3.4	-3.4	-3.4	-3.4	-3.4
Manufacturing	-15.1	-32.3	-135.4	-137.2	-144.4
All products	-17.1	-45.7	-144.0	-150.5	-160.1
(% GDP)	-0.1	-0.3	-1.0	-1.0	-1.1

Source: MENA trade simulation model, November 6, 2003.

Table 15. Saudi Arabia: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-4.8	-4.3	-6.5	-6.6	-7.4
<u>Change in Real Exports</u>					
Agriculture	22.9	12.1	24.6	22.2	18.6
Minerals	1,380.5	1,226.6	1,863.0	1,883.5	2,013.8
Manufacturing	589.5	498.8	425.0	439.6	474.7
All products	1,992.9	1,737.4	2,312.6	2,345.3	2,507.1
(% Change)	3.0	2.6	3.5	3.6	3.8
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	5.9	141.5	-16.3	75.3	58.4
Minerals	19.3	20.7	14.3	14.1	13.4
Manufacturing	601.6	1,402.7	1,809.1	1,791.9	1,740.8
All products	626.7	1,564.9	1,807.1	1,881.3	1,812.6
(% Change)	2.1	5.2	6.1	6.3	6.1
<u>Trade Diversion</u>					
Agriculture	14.8	7.7	513.8	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	254.0	206.0	1,713.5	1,621.1	0.0
All products	268.8	213.7	2,227.3	1,621.1	0.0
(% Imports)	0.9	0.7	7.5	5.4	0.0
<u>Net Trade Creation</u>					
Agriculture	-8.9	133.8	-530.1	75.3	58.4
Minerals	19.3	20.7	14.3	14.1	13.4
Manufacturing	347.6	1,196.7	95.6	170.8	1,740.8
All products	358.0	1,351.2	-420.2	260.2	1,812.6
(% Imports)	1.2	4.5	-1.4	0.9	6.1
<u>Change in Consumer Surplus</u>					
Agriculture	0.4	4.7	0.1	1.9	0.7
Minerals	0.7	0.8	0.4	0.4	0.3
Manufacturing	28.5	64.9	38.5	40.4	32.3
All products	29.7	70.4	39.1	42.6	33.3
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	32.1	16.5	34.6	31.1	25.8
Minerals	2,825.4	2,503.9	3,843.4	3,887.1	4,164.9
Manufacturing	623.7	525.9	446.1	462.9	498.6
All products	3,481.2	3,046.4	4,324.1	4,381.2	4,689.3
(% GDP)	2.0	1.8	2.5	2.5	2.7
<u>Forgone Tariff Revenue</u>					
Agriculture	9.6	1.4	63.0	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	144.0	112.3	116.8	178.2	0.0
All products	153.6	113.6	179.8	178.2	0.0
(% GDP)	0.1	0.1	0.1	0.1	0.0
<u>Change in Economic Welfare</u>					
Agriculture	22.9	19.8	-28.3	33.0	26.5
Minerals	2,826.1	2,504.7	3,843.8	3,887.5	4,165.3
Manufacturing	508.2	478.6	367.8	325.1	530.8
All products	3,357.2	3,003.1	4,183.4	4,245.6	4,722.6
(% GDP)	1.9	1.7	2.4	2.5	2.7
<u>Change in Tariff Revenue</u>					
Agriculture	-219.8	-359.2	-276.9	-357.4	-387.0
Minerals	-41.2	-41.2	-41.2	-41.2	-41.2
Manufacturing	-1,946.2	-2,080.7	-2,871.0	-2,892.4	-2,971.8
All products	-2,207.2	-2,481.0	-3,189.1	-3,291.0	-3,400.0
(% GDP)	-1.3	-1.4	-1.8	-1.9	-2.0

Source: MENA trade simulation model, November 6, 2003.

Table 16. United Arab Emirates: Trade and Welfare Impacts of EU-GCC Trade Arrangements
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-8.7	-7.5	-9.7	-9.9	-10.7
<u>Change in Real Exports</u>					
Agriculture	27.0	16.0	27.2	25.1	22.4
Minerals	645.8	549.1	707.1	726.9	760.4
Manufacturing	203.0	168.8	170.1	175.6	167.5
All products	875.8	733.9	904.4	927.6	950.3
(% Change)	5.4	4.6	5.6	5.8	5.9
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	55.8	261.1	53.5	163.0	140.7
Minerals	-2.0	1.6	-4.7	-5.5	-6.2
Manufacturing	-400.7	310.9	505.7	359.8	509.0
All products	-346.9	573.5	554.4	517.4	643.5
(% Change)	-1.3	2.2	2.1	2.0	2.5
<u>Trade Diversion</u>					
Agriculture	16.6	7.8	511.1	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	282.2	244.2	1,522.6	1,462.6	0.0
All products	298.8	252.0	2,033.6	1,462.6	0.0
(% Imports)	1.2	1.0	7.8	5.6	0.0
<u>Net Trade Creation</u>					
Agriculture	39.2	253.3	-457.6	163.0	140.7
Minerals	-2.0	1.6	-4.7	-5.5	-6.2
Manufacturing	-682.9	66.6	-1,016.9	-1,102.8	509.0
All products	-645.8	321.5	-1,479.2	-945.3	643.5
(% Imports)	-2.5	1.2	-5.7	-3.6	2.5
<u>Change in Consumer Surplus</u>					
Agriculture	3.7	12.2	1.4	5.9	3.9
Minerals	0.0	0.0	0.0	0.1	0.1
Manufacturing	21.4	40.6	19.4	13.4	25.0
All products	25.1	52.8	20.9	19.4	29.0
(% GDP)	0.1	0.1	0.0	0.0	0.1
<u>Change in Producer Surplus</u>					
Agriculture	38.7	22.3	39.0	35.9	31.7
Minerals	1,350.1	1,140.4	1,484.5	1,528.2	1,602.2
Manufacturing	222.2	184.1	185.7	192.9	181.8
All products	1,610.9	1,346.8	1,709.2	1,756.9	1,815.7
(% GDP)	3.5	2.9	3.7	3.8	3.9
<u>Forgone Tariff Revenue</u>					
Agriculture	12.9	1.7	62.4	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	168.7	145.8	193.4	400.0	0.0
All products	181.6	147.5	255.8	400.0	0.0
(% GDP)	0.4	0.3	0.6	0.9	0.0
<u>Change in Economic Welfare</u>					
Agriculture	29.5	32.8	-21.9	41.8	35.6
Minerals	1,350.1	1,140.4	1,484.5	1,528.2	1,602.2
Manufacturing	74.9	78.9	11.7	-193.7	206.8
All products	1,454.5	1,252.1	1,474.3	1,376.3	1,844.7
(% GDP)	3.1	2.7	3.2	3.0	4.0
<u>Change in Tariff Revenue</u>					
Agriculture	-523.5	-693.1	-575.3	-691.4	-721.3
Minerals	-29.0	-29.0	-29.0	-29.0	-29.0
Manufacturing	-2,357.7	-2,320.8	-3,062.8	-3,092.4	-3,205.9
All products	-2,910.2	-3,042.8	-3,667.1	-3,812.8	-3,956.2
(% GDP)	-6.3	-6.5	-7.9	-8.2	-8.5

Source: MENA trade simulation model, November 6, 2003.

Table 17. GCC Countries: Impacts of a "High" vs. "Low" GCC Common External Tariff
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (2.5% CET)	FTA (5% CET)	FTA (2.5% CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-4.8	-5.9	-6.4	-6.5	-7.4
<u>Change in Real Exports</u>					
Agriculture	65.3	57.5	69.1	64.4	53.3
Minerals	2,282.8	2,861.0	3,120.9	3,116.3	3,404.5
Manufacturing	1,161.1	1,008.5	888.8	1,014.6	932.1
All products	3,509.2	3,927.1	4,078.8	4,195.2	4,389.9
(% Change)	2.9	3.2	3.3	3.4	3.6
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	54.1	154.9	19.0	162.0	212.7
Minerals	36.8	8.3	-2.4	3.3	-14.5
Manufacturing	197.3	1,784.5	2,962.4	3,244.0	2,804.9
All products	288.2	1,947.7	2,979.0	3,409.3	3,003.1
(% Change)	0.4	2.6	4.0	4.6	4.1
<u>Trade Diversion</u>					
Agriculture	41.4	36.3	1,305.5	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	785.4	680.9	4,310.1	1,035.9	0.0
All products	826.8	717.2	5,615.6	1,035.9	0.0
(% Imports)	1.1	1.0	7.6	1.4	0.0
<u>Net Trade Creation</u>					
Agriculture	12.7	118.5	-1,286.4	162.0	212.7
Minerals	36.8	8.3	-2.4	3.3	-14.5
Manufacturing	-588.1	1,103.5	-1,347.8	2,208.1	2,804.9
All products	-538.6	1,230.4	-2,636.6	2,373.3	3,003.1
(% Imports)	-0.7	1.7	-3.6	3.2	4.1
<u>Change in Consumer Surplus</u>					
Agriculture	4.7	7.3	1.9	8.3	5.5
Minerals	0.9	0.6	0.5	0.5	0.6
Manufacturing	70.6	111.2	80.6	99.5	79.4
All products	76.2	119.1	83.1	108.3	85.6
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	92.1	80.7	97.8	90.7	74.5
Minerals	4,696.8	5,908.4	6,451.6	6,444.3	7,055.9
Manufacturing	1,236.3	1,067.6	945.6	1,079.2	987.3
All products	6,025.2	7,056.6	7,494.9	7,614.1	8,117.8
(% GDP)	2.0	2.4	2.5	2.5	2.7
<u>Forgone Tariff Revenue</u>					
Agriculture	29.0	14.4	159.4	0.0	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	448.8	221.8	388.1	198.5	0.0
All products	477.9	236.2	547.6	198.5	0.0
(% GDP)	0.2	0.1	0.2	0.1	0.0
<u>Change in Economic Welfare</u>					
Agriculture	67.8	73.6	-59.7	99.0	80.0
Minerals	4,697.6	5,909.0	6,452.1	6,444.7	7,056.6
Manufacturing	858.0	956.9	638.1	980.2	1,066.7
All products	5,623.5	6,939.5	7,030.4	7,524.0	8,203.3
(% GDP)	1.9	2.3	2.3	2.5	2.7
<u>Change in Tariff Revenue</u>					
Agriculture	-780.4	-994.1	-921.0	-974.1	-1,213.4
Minerals	-200.1	-200.1	-200.1	-200.1	-200.1
Manufacturing	-4,864.9	-6,037.0	-6,999.3	-7,024.3	-7,296.3
All products	-5,845.3	-7,231.3	-8,120.5	-8,198.5	-8,709.7
(% GDP)	-1.9	-2.4	-2.7	-2.7	-2.9

Source: MENA trade simulation model, November 11, 2003.

Table 18. European Union: Impacts of a "High" vs. "Low" GCC Common External Tariff
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (2.5% CET)	FTA (5% CET)	FTA (2.5% CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	0.0	0.0	0.3	-0.4	-1.9
<u>Change in Real Exports</u>					
Agriculture	7.5	16.2	2,760.6	2,693.8	1,742.5
Minerals	-125.8	-176.7	-347.0	-120.1	352.2
Manufacturing	99.6	127.7	12,991.7	28,930.7	40,805.3
All products	-18.7	-32.8	15,405.3	31,504.3	42,900.0
(% Change)	0.0	0.0	0.7	1.4	2.0
<u>Trade Creation = Change in Real Imports</u>					
Agriculture	-8.7	-19.9	1,120.1	1,210.7	2,360.3
Minerals	460.8	647.9	1,446.3	520.0	-887.8
Manufacturing	-165.3	-213.2	21,986.3	30,093.7	42,256.3
All products	286.8	414.8	24,552.6	31,824.4	43,728.8
(% Change)	0.0	0.0	1.1	1.5	2.0
<u>Trade Diversion</u>					
Agriculture	0.0	0.0	33.5	64.4	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	196.9	565.1	0.0
All products	0.0	0.0	230.4	629.4	0.0
(% Imports)	0.0	0.0	0.0	0.0	0.0
<u>Net Trade Creation</u>					
Agriculture	-8.7	-19.9	1,086.6	1,146.4	2,360.3
Minerals	460.8	647.9	1,446.3	520.0	-887.8
Manufacturing	-165.3	-213.2	21,789.4	29,528.7	42,256.3
All products	286.8	414.8	24,322.2	31,195.0	43,728.8
(% Imports)	0.0	0.0	1.1	1.4	2.0
<u>Change in Consumer Surplus</u>					
Agriculture	-0.4	-0.9	31.0	8.5	29.5
Minerals	0.7	1.4	7.0	0.9	2.8
Manufacturing	-18.7	-22.4	363.7	749.6	630.2
All products	-18.4	-22.0	401.6	759.0	662.5
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Producer Surplus</u>					
Agriculture	10.0	21.7	3,747.1	3,656.4	2,349.5
Minerals	-251.2	-352.7	-691.1	-239.9	707.6
Manufacturing	134.6	169.9	14,476.2	30,367.9	42,335.4
All products	-106.5	-161.1	17,532.2	33,784.4	45,392.6
(% GDP)	0.0	0.0	0.2	0.4	0.6
<u>Forgone Tariff Revenue</u>					
Agriculture	0.0	0.0	19.6	30.4	0.0
Minerals	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.0	0.0	106.9	166.0	0.0
All products	0.0	0.0	126.5	196.4	0.0
(% GDP)	0.0	0.0	0.0	0.0	0.0
<u>Change in Economic Welfare</u>					
Agriculture	9.6	20.7	3,758.4	3,634.5	2,379.1
Minerals	-250.5	-351.3	-684.1	-239.0	710.4
Manufacturing	116.0	147.5	14,733.0	30,951.5	42,965.6
All products	-124.9	-183.0	17,807.4	34,347.0	46,055.0
(% GDP)	0.0	0.0	0.2	0.4	0.6
<u>Change in Tariff Revenue</u>					
Agriculture	-0.1	-0.1	-16.4	-22.4	-5,654.7
Minerals	-491.1	-491.1	-491.1	-491.1	-491.1
Manufacturing	-3.8	-5.5	-37,418.0	-28,769.4	-66,062.0
All products	-495.0	-496.7	-37,925.5	-29,282.8	-72,207.8
(% GDP)	0.0	0.0	-0.5	-0.4	-0.9

Source: MENA trade simulation model, November 11, 2003.

APPENDIX: Table 19. Exports by HS Section in the MENA Trade Simulation Model, Average 1999-2001 (US\$ Th)

HS Section	Algeria	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Libya	Morocco
Live animals & animal products	3,874	10,708	20,057	72,221	135	37,232	22,619	8,170	4,587	7,900	685,327
Vegetable products	16,509	1,193	298,008	626,780	22,543	756,578	112,005	745	50,180	27	574,016
Fats & oils	4,718	6,580	23,270	19,332	213	2,131	48,303	709	8,630	92	16,556
Manufactured foodstuffs	8,414	17,652	50,969	178,486	1,492	354,659	46,825	2,987	82,039	3,252	372,567
Mineral products	16,915,742	4,285,617	1,531,223	20,538,690	12,331,957	256,934	147,245	13,115,153	26,441	10,759,957	788,589
Chemical	72,730	131,249	254,665	309,922	2,047	3,162,657	525,058	195,160	87,148	266,772	921,100
Rubber & plastics	72,733	25,898	118,487	136,826	238	1,250,842	50,154	235,122	20,485	20,061	48,500
Hides & leather products	11,126	1,222	19,164	75,824	215	12,695	13,261	2,327	17,297	7,289	68,999
Cork & wood articles	13,905	270	4,759	6,865	0	10,378	872	371	5,699	95	61,680
Pulp & paper products	3,531	29,576	30,351	7,116	71	122,988	69,589	3,389	56,013	175	72,893
Textiles & apparel	665	377,593	802,803	870,006	1,646	1,262,951	179,950	22,007	57,725	602	2,558,252
Footwear & other made-up articles	246	2,704	2,250	67,689	0	37,260	4,507	193	11,258	0	159,053
Stone & mineral products	104	2,566	100,395	74,715	69	83,132	16,710	2,795	18,951	116	46,194
Precious stones & jewellery	24	7,172	5,771	3,390	20	9,150,398	12,075	10,454	121,103	323	46,698
Base metals & metal products	90,678	838,817	270,422	400,137	8,343	954,187	64,415	16,703	68,942	64,610	142,404
Machinery	28,687	26,819	38,017	60,998	7,869	8,464,674	90,166	67,682	87,291	11,215	782,619
Transport equipment	26,825	13,002	5,497	73,696	3,057	947,424	24,653	7,805	10,959	1,071	30,243
Professional equipment	7,863	108	1,996	3,308	1,642	1,603,541	2,159	9,090	5,379	1,147	58,883
Arms & ammunition	0	0	0	15,445	0	1,364	0	591	276	0	0
Miscellaneous manufactures	1,227	12,465	25,241	27,886	1,165	77,194	15,586	1,001	19,078	217	31,218
Works of art	0	74	229,480	96,659	160	74,382	395	66,442	567	1,022	2,229
All products	17,279,596	5,791,280	3,832,821	23,665,990	12,382,881	28,623,594	1,446,547	13,768,897	760,047	11,145,942	7,468,016
	Oman	Qatar	S. Arabia	Syria	Tunisia	Turkey	UAE	Yemen	EU15	Japan	US
Live animals & animal products	142,482	4,253	189,977	21,121	94,424	158,630	87,374	42,612	51,616,288	555,090	11,030,296
Vegetable products	53,970	178	90,348	126,015	95,521	1,890,158	75,468	6,633	43,435,629	628,270	22,836,953
Fats & oils	25,060	461	20,546	3,799	279,627	250,467	82,244	0	8,014,709	99,970	1,769,367
Manufactured foodstuffs	250,950	605	146,523	17,881	116,845	1,657,591	98,993	660	85,809,119	1,361,089	18,127,880
Mineral products	7,838,770	9,906,204	59,700,078	3,566,082	650,832	887,118	14,452,648	2,387,829	80,106,504	1,748,647	14,501,214
Chemical	76,262	239,408	3,092,808	10,150	628,841	857,009	62,724	603	239,762,905	27,281,378	61,561,068
Rubber & plastics	53,970	221,509	1,208,016	7,351	68,419	903,029	24,390	95	103,581,335	15,954,584	31,842,827
Hides & leather products	774	1,794	25,554	50,218	59,239	448,292	4,095	6,296	15,172,201	225,733	3,046,596
Cork & wood articles	1,204	0	6,105	2,130	18,125	80,315	1,253	2	18,630,141	74,940	5,832,889
Pulp & paper products	8,218	410	156,834	4,840	48,263	211,993	28,894	233	70,162,908	2,817,893	18,898,671
Textiles & apparel	134,634	136,640	135,013	368,828	2,442,207	10,096,310	267,433	1,082	99,572,706	7,707,246	19,676,971
Footwear & other made-up articles	2,553	316	1,445	1,313	270,992	121,602	3,262	0	17,876,172	161,333	818,597
Stone & mineral products	25,961	89	137,670	5,389	49,247	860,110	66,881	0	34,424,628	4,462,120	5,581,640
Precious stones & jewellery	7,925	2,116	27,398	630	7,888	389,867	39,731	4,219	34,830,444	1,770,072	9,840,804
Base metals & metal products	122,949	190,671	551,940	13,220	111,376	3,116,003	754,324	2,376	149,555,133	25,065,462	27,616,096
Machinery	212,541	172	255,116	15,564	740,870	3,421,777	16,333	8,447	616,007,851	193,882,405	241,590,016
Transport equipment	650,524	221	18,507	1,984	54,920	2,564,663	5,588	260	320,748,226	96,600,350	103,436,887
Professional equipment	20,462	0	3,118	2,901	35,273	72,022	75	1,039	69,064,934	31,528,368	40,467,111
Arms & ammunition	57	0	279	0	0	21,314	0	0	1,480,041	167,989	2,144,489
Miscellaneous manufactures	36,415	51	27,884	3,399	46,011	271,919	9,418	4	46,957,500	5,850,781	10,085,842
Works of art	41,397	427	278	39,434	66	279,581	0	5,463	78,345,640	15,463,410	22,751,722
All products	9,707,076	10,705,525	65,795,436	4,262,247	5,818,982	28,559,770	16,081,128	2,467,851	2,185,155,012	433,407,131	673,457,934

Source: UN Statistics Division, *Personal Computer Trade Analysis System*, 2003.

APPENDIX: Table 20. Imports by HS Section in the MENA Trade Simulation Model, Average 1999-2001 (US\$ Th)

HS Section	Algeria	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Libya	Morocco
Live animals & animal products	501,481	134,814	647,546	116,855	112,107	278,549	164,456	190,560	348,408	105,265	98,626
Vegetable products	1,345,671	141,261	1,745,367	1,644,748	182,324	818,057	382,343	112,727	348,697	212,177	949,290
Fats & oils	247,182	12,571	297,021	443,124	93,355	95,144	59,317	27,589	52,626	95,549	158,380
Manufactured foodstuffs	471,822	192,532	833,643	421,136	146,749	802,885	243,269	242,852	460,507	133,852	338,295
Mineral products	211,827	1,959,359	1,098,191	500,319	5,114	2,972,993	484,345	50,922	1,016,528	332,393	1,838,102
Chemical	929,966	385,218	1,235,426	1,675,762	157,378	2,407,207	386,326	311,622	564,131	215,470	767,512
Rubber & plastics	373,764	85,345	761,974	656,942	35,992	1,137,695	175,717	146,159	236,796	65,084	441,088
Hides & leather products	14,474	6,883	13,816	901	535	68,560	3,873	22,339	26,366	2,582	69,653
Cork & wood articles	201,688	35,486	586,187	42,423	11,280	307,424	51,936	51,439	96,892	23,454	204,200
Pulp & paper products	224,878	69,843	440,638	418,150	19,200	677,772	129,459	96,621	186,396	40,448	235,671
Textiles & apparel	214,889	242,379	348,457	502,366	29,851	1,188,459	282,577	350,509	401,300	140,046	1,722,389
Footwear & other made-up articles	29,413	15,884	34,651	329	15,030	208,675	12,585	43,508	60,458	16,986	35,689
Stone & mineral products	128,260	79,324	149,932	122,664	14,408	412,618	56,322	127,193	139,537	36,035	93,077
Precious stones & jewellery	2,951	14,473	40,904	2,978	167	6,583,106	30,003	15,691	415,441	66,822	6,978
Base metals & metal products	909,848	170,519	1,388,472	1,902,153	141,050	1,726,540	319,093	308,649	405,383	218,307	680,352
Machinery	2,295,542	520,712	2,986,887	4,245,720	745,841	8,816,972	644,533	1,196,527	903,197	812,715	2,469,335
Transport equipment	792,374	254,998	522,860	1,068,849	346,871	2,929,859	563,710	978,963	627,701	349,593	737,504
Professional equipment	185,472	49,944	289,622	360,636	116,869	1,309,155	83,939	146,062	122,657	96,667	169,507
Arms & ammunition	0	0	1,312	25,790	0	0	0	26,611	7,620	440	1,456
Miscellaneous manufactures	74,226	75,746	124,266	24,175	14,835	531,701	52,980	145,165	151,020	61,425	143,169
Works of art	1,247	486	811,722	0	23,140	140,434	90,346	62,055	2,674	68,580	234
All products	9,156,970	4,447,772	14,358,890	14,176,018	2,212,096	33,413,800	4,217,128	4,653,761	6,574,335	3,093,888	11,160,503
	Oman	Qatar	S. Arabia	Syria	Tunisia	Turkey	UAE	Yemen	EU15	Japan	US
Live animals & animal products	285,725	161,562	1,435,148	24,234	44,156	103,451	1,352,087	125,724	53,375,759	21,164,837	15,348,513
Vegetable products	240,311	132,409	1,999,322	223,708	350,525	762,306	2,044,420	222,985	56,281,283	13,082,828	14,847,151
Fats & oils	63,519	12,851	222,373	76,400	99,688	384,883	902,277	53,046	8,245,122	680,800	1,623,699
Manufactured foodstuffs	572,742	124,063	1,369,760	206,828	221,124	729,597	3,954,951	182,667	78,008,647	14,058,051	22,211,482
Mineral products	206,808	85,558	340,610	108,650	838,351	6,604,220	346,921	15,534	181,878,157	73,889,586	120,553,043
Chemical	284,754	243,217	2,550,123	283,402	520,992	5,165,001	1,336,641	108,604	199,524,915	22,257,799	66,606,067
Rubber & plastics	165,457	97,219	1,057,836	178,844	363,154	2,340,907	763,349	62,369	95,450,688	7,005,416	29,588,455
Hides & leather products	8,447	8,829	99,531	2,236	128,224	445,419	120,213	1,510	15,336,984	3,960,451	8,653,827
Cork & wood articles	53,926	39,816	363,082	24,651	109,581	248,217	210,414	34,367	25,625,735	10,943,772	16,964,604
Pulp & paper products	92,150	49,503	592,258	96,460	176,728	1,029,391	286,398	31,472	62,036,125	4,344,448	21,894,425
Textiles & apparel	197,403	171,146	1,755,764	278,531	1,819,412	3,065,402	2,630,452	124,761	121,628,133	22,968,809	74,742,014
Footwear & other made-up articles	32,359	20,114	249,134	946	77,784	112,127	227,446	12,472	20,596,821	3,544,593	18,226,523
Stone & mineral products	77,069	67,408	486,194	26,263	62,682	334,063	424,737	11,654	25,508,346	2,842,804	12,388,725
Precious stones & jewellery	74,308	9,907	1,179,273	1,826	28,915	413,260	1,250,569	393	38,148,704	6,587,089	26,811,168
Base metals & metal products	357,468	424,676	2,424,399	247,592	528,653	4,148,692	1,364,501	128,436	145,589,638	14,343,461	55,033,584
Machinery	1,076,969	1,272,702	6,607,097	847,668	1,843,224	11,752,022	4,599,456	332,421	569,275,211	81,833,584	338,274,923
Transport equipment	1,062,126	575,566	5,389,687	362,182	981,420	4,478,387	2,775,086	126,986	279,764,968	13,629,150	181,115,449
Professional equipment	91,137	144,864	857,992	75,971	173,685	1,160,760	574,512	30,086	70,807,936	15,169,494	39,418,257
Arms & ammunition	1,075	342	273,431	427	798	142,694	6,585	1,700	991,255	173,554	814,863
Miscellaneous manufactures	79,595	109,002	562,220	20,690	81,097	449,921	738,079	17,541	50,457,356	8,159,096	47,872,755
Works of art	146,962	7,031	35,210	39,949	2,247	2,290,156	2,188	9,139	78,430,559	5,679,637	52,801,783
All products	5,170,309	3,757,785	29,850,445	3,127,458	8,452,436	46,160,874	25,911,282	1,633,867	2,176,962,342	346,319,258	1,165,791,308

Source: UN Statistics Division, *Personal Computer Trade Analysis System*, 2003.

APPENDIX: Table 21. GCC Countries: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-4.8	-4.2	-6.4	-6.5	-7.4
<u>Change in Real Exports</u>					
Live animals, animal prods.	34.1	17.5	35.6	31.2	27.5
Vegetable prods.	18.6	10.2	20.1	20.0	15.2
Fats, oils	12.7	6.5	13.4	11.1	10.6
Manufactured foodstuffs	39.3	51.3	48.3	58.1	42.1
Mineral prods.	2,282.8	1,946.4	3,120.9	3,166.4	3,404.5
Chemicals	370.6	310.3	252.5	260.9	294.2
Rubber, plastics	160.7	132.6	104.7	111.7	127.7
Hides, leather prods.	3.7	1.6	3.2	2.8	2.8
Cork, wood articles	1.0	0.8	0.9	0.9	0.7
Pulp, paper prods.	24.4	19.1	17.2	17.2	17.7
Textiles, apparel	114.2	95.6	150.9	152.2	100.7
Footwear, made-up articles	1.2	0.9	1.3	1.3	1.0
Stone, mineral prods.	26.7	22.3	19.1	19.0	21.3
Precious stones, jewellery	10.9	9.1	8.7	8.7	8.1
Base metals, metal prods.	280.0	226.6	192.4	194.9	219.7
Machinery	52.6	43.1	34.9	34.9	39.4
Transport equip.	57.2	45.1	37.6	37.5	43.4
Professional equip.	2.5	2.0	2.5	2.5	1.9
Arms, ammunition	0.1	0.0	0.0	0.0	0.0
Miscellaneous manufs.	8.7	7.1	8.0	8.0	6.6
Works of art	7.3	5.2	6.6	6.6	4.7
All products	3,509.2	2,953.2	4,078.8	4,145.8	4,389.9
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	39.6	203.9	32.0	109.8	107.5
Vegetable prods.	21.3	175.8	1.1	120.0	85.2
Fats, oils	-6.8	73.9	-14.1	28.2	20.0
Manufactured foodstuffs	511.3	320.6	384.8	211.2	487.6
Mineral prods.	36.8	46.6	-2.4	-5.0	-14.5
Chemicals	-2.1	132.1	251.5	230.1	159.8
Rubber, plastics	11.7	76.3	133.1	116.0	82.3
Hides, leather prods.	-1.6	19.2	3.6	9.5	7.4
Cork, wood articles	2.0	17.3	5.7	6.7	22.9
Pulp, paper prods.	-10.4	25.5	37.8	37.5	34.5
Textiles, apparel	90.6	246.4	47.6	114.4	204.2
Footwear, made-up articles	20.3	52.8	11.0	31.1	40.9
Stone, mineral prods.	43.0	88.5	124.9	125.1	99.7
Precious stones, jewellery	59.9	170.3	193.2	192.1	229.2
Base metals, metal prods.	-26.5	188.8	82.7	74.2	213.0
Machinery	-180.4	498.1	1,106.2	1,079.8	774.5
Transport equip.	-384.4	66.4	462.5	448.6	225.1
Professional equip.	0.3	67.6	18.8	16.6	87.1
Arms, ammunition	-7.4	5.6	0.1	-0.8	-1.6
Miscellaneous manufs.	70.8	116.7	97.1	94.6	132.4
Works of art	0.4	5.1	1.8	1.8	6.0
All products	288.2	2,597.5	2,979.0	3,041.2	3,003.1
<u>Trade Diversion</u>					
Live animals, animal prods.	23.8	11.9	1,305.5	0.0	0.0
Vegetable prods.	11.8	6.3	0.0	0.0	0.0
Fats, oils	5.8	2.7	0.0	0.0	0.0
Manufactured foodstuffs	28.7	38.2	251.3	365.6	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	204.8	170.9	0.0	0.0	0.0
Rubber, plastics	100.0	81.8	0.0	0.0	0.0
Hides, leather prods.	2.4	1.0	251.9	0.0	0.0
Cork, wood articles	0.6	0.5	482.8	453.5	0.0
Pulp, paper prods.	15.0	11.8	0.0	0.0	0.0
Textiles, apparel	87.4	73.2	0.0	0.0	0.0
Footwear, made-up articles	0.9	0.7	0.0	0.0	0.0
Stone, mineral prods.	17.7	14.8	0.0	0.0	0.0
Precious stones, jewellery	6.7	5.5	331.7	305.3	0.0
Base metals, metal prods.	218.3	176.9	0.0	0.0	0.0
Machinery	38.4	31.2	0.0	0.0	0.0
Transport equip.	50.9	40.1	0.0	0.0	0.0
Professional equip.	2.2	1.8	1,745.8	1,750.3	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	6.9	5.7	991.0	1,002.3	0.0
Works of art	4.4	3.1	255.7	255.7	0.0
All products	826.8	677.7	5,615.6	4,132.6	0.0

APPENDIX: Table 21 (Cont.). GCC Countries: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	15.8	192.0	-1,273.4	109.8	107.5
Vegetable prods.	9.5	169.5	1.1	120.0	85.2
Fats, oils	-12.6	71.3	-14.1	28.2	20.0
Manufactured foodstuffs	482.5	282.4	133.5	-154.4	487.6
Mineral prods.	36.8	46.6	-2.4	-5.0	-14.5
Chemicals	-207.0	-38.8	251.5	230.1	159.8
Rubber, plastics	-88.3	-5.5	133.1	116.0	82.3
Hides, leather prods.	-4.0	18.3	-248.3	9.5	7.4
Cork, wood articles	1.4	16.8	-477.1	-446.8	22.9
Pulp, paper prods.	-25.3	13.8	37.8	37.5	34.5
Textiles, apparel	3.3	173.2	47.6	114.4	204.2
Footwear, made-up articles	19.4	52.1	11.0	31.1	40.9
Stone, mineral prods.	25.3	73.7	124.9	125.1	99.7
Precious stones, jewellery	53.2	164.8	-138.4	-113.2	229.2
Base metals, metal prods.	-244.9	11.9	82.7	74.2	213.0
Machinery	-218.8	466.9	1,106.2	1,079.8	774.5
Transport equip.	-435.4	26.3	462.5	448.6	225.1
Professional equip.	-1.9	65.8	-1,727.0	-1,733.7	87.1
Arms, ammunition	-7.4	5.6	0.1	-0.8	-1.6
Miscellaneous manufs.	63.9	111.0	-893.9	-907.7	132.4
Works of art	-4.0	2.0	-253.9	-253.9	6.0
All products	-538.6	1,919.8	-2,636.6	-1,091.4	3,003.1
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	3.3	9.7	1.8	4.4	3.5
Vegetable prods.	1.4	7.1	0.5	3.9	1.7
Fats, oils	0.0	2.4	-0.4	0.6	0.4
Manufactured foodstuffs	51.6	42.5	19.7	11.3	26.4
Mineral prods.	0.9	1.0	0.5	0.5	0.6
Chemicals	2.9	4.5	6.5	5.9	4.1
Rubber, plastics	0.9	2.1	3.2	2.6	1.7
Hides, leather prods.	0.0	0.6	0.1	0.2	0.2
Cork, wood articles	0.2	1.0	0.1	0.1	0.4
Pulp, paper prods.	0.2	1.3	0.9	0.9	0.9
Textiles, apparel	5.2	12.8	3.6	6.5	3.8
Footwear, made-up articles	1.4	3.2	0.9	1.7	1.1
Stone, mineral prods.	3.1	5.4	4.2	4.2	3.0
Precious stones, jewellery	4.0	9.9	4.1	4.1	5.4
Base metals, metal prods.	2.8	7.7	2.5	2.7	5.1
Machinery	3.1	30.8	24.3	24.1	16.9
Transport equip.	-11.2	4.8	6.3	6.3	3.5
Professional equip.	0.6	3.7	0.5	0.5	1.4
Arms, ammunition	-0.2	0.1	0.0	0.0	0.0
Miscellaneous manufs.	6.1	9.1	3.8	3.6	5.5
Works of art	0.0	0.2	0.0	0.0	0.1
All products	76.2	159.8	83.1	84.3	85.6
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	47.9	24.0	50.2	43.6	38.3
Vegetable prods.	26.2	14.0	28.4	28.4	21.2
Fats, oils	18.0	8.9	19.2	15.7	14.9
Manufactured foodstuffs	55.3	73.1	68.6	83.4	59.4
Mineral prods.	4,696.8	3,992.3	6,451.6	6,549.7	7,055.9
Chemicals	389.1	323.4	261.3	270.3	306.0
Rubber, plastics	168.4	137.9	108.1	115.6	132.7
Hides, leather prods.	3.9	1.6	3.3	2.9	2.9
Cork, wood articles	1.0	0.8	1.0	1.0	0.8
Pulp, paper prods.	25.8	20.0	17.9	17.9	18.4
Textiles, apparel	120.8	100.3	161.9	163.4	105.9
Footwear, made-up articles	1.2	0.9	1.4	1.4	1.0
Stone, mineral prods.	28.3	23.4	19.9	19.9	22.4
Precious stones, jewellery	11.6	9.5	9.1	9.1	8.4
Base metals, metal prods.	296.8	237.7	200.6	203.2	230.2
Machinery	55.1	44.7	36.0	36.1	40.8
Transport equip.	59.6	46.6	38.7	38.5	44.8
Professional equip.	2.6	2.0	2.6	2.6	1.9
Arms, ammunition	0.1	0.0	0.0	0.0	0.0
Miscellaneous manufs.	9.1	7.4	8.4	8.4	6.9
Works of art	7.6	5.4	6.8	6.8	4.8
All products	6,025.2	5,074.1	7,494.9	7,617.8	8,117.8

APPENDIX: Table 21 (Cont.). GCC Countries: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	17.3	2.7	159.4	0.0	0.0
Vegetable prods.	8.0	1.4	0.0	0.0	0.0
Fats, oils	3.8	0.0	0.0	0.0	0.0
Manufactured foodstuffs	21.6	39.2	201.5	543.9	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	118.9	93.9	0.0	0.0	0.0
Rubber, plastics	63.4	50.1	0.0	0.0	0.0
Hides, leather prods.	1.3	0.0	6.4	0.0	0.0
Cork, wood articles	0.3	0.2	25.7	23.7	0.0
Pulp, paper prods.	7.6	5.1	0.0	0.0	0.0
Textiles, apparel	47.8	37.7	0.0	0.0	0.0
Footwear, made-up articles	0.5	0.3	0.0	0.0	0.0
Stone, mineral prods.	8.8	6.9	0.0	0.0	0.0
Precious stones, jewellery	3.5	2.7	36.2	32.2	0.0
Base metals, metal prods.	108.5	77.3	0.0	0.0	0.0
Machinery	23.7	18.7	0.0	0.0	0.0
Transport equip.	33.6	26.5	0.0	0.0	0.0
Professional equip.	1.6	1.3	58.3	57.8	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.9	3.1	52.3	50.8	0.0
Works of art	3.6	2.7	7.7	7.7	0.0
All products	477.9	369.6	547.6	716.3	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	34.0	31.1	-107.4	48.1	41.8
Vegetable prods.	19.7	19.8	28.9	32.3	22.9
Fats, oils	14.2	11.3	18.8	16.3	15.4
Manufactured foodstuffs	85.3	76.4	-113.2	-449.2	85.8
Mineral prods.	4,697.6	3,993.3	6,452.1	6,550.2	7,056.6
Chemicals	273.1	234.0	267.8	276.2	310.1
Rubber, plastics	105.9	89.9	111.3	118.2	134.4
Hides, leather prods.	2.6	2.2	-2.9	3.1	3.0
Cork, wood articles	0.9	1.6	-24.6	-22.6	1.2
Pulp, paper prods.	18.3	16.2	18.8	18.8	19.3
Textiles, apparel	78.2	75.4	165.5	169.9	109.7
Footwear, made-up articles	2.2	3.8	2.3	3.1	2.1
Stone, mineral prods.	22.5	21.9	24.0	24.0	25.4
Precious stones, jewellery	12.1	16.7	-23.0	-19.1	13.9
Base metals, metal prods.	191.0	168.1	203.1	205.9	235.3
Machinery	34.5	56.8	60.3	60.1	57.7
Transport equip.	14.7	25.0	45.0	44.8	48.3
Professional equip.	1.6	4.5	-55.3	-54.8	3.4
Arms, ammunition	-0.2	0.1	0.0	0.1	0.1
Miscellaneous manufs.	11.3	13.4	-40.1	-38.8	12.4
Works of art	3.9	2.9	-0.9	-0.9	4.9
All products	5,623.5	4,864.3	7,030.4	6,985.8	8,203.3
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-301.9	-431.6	-458.0	-428.6	-458.0
Vegetable prods.	-373.9	-555.8	-365.0	-554.6	-596.4
Fats, oils	-104.6	-158.9	-98.1	-158.9	-158.9
Manufactured foodstuffs	-1,043.2	-812.5	-1,364.3	-1,364.3	-1,364.3
Mineral prods.	-200.1	-200.1	-200.1	-200.1	-200.1
Chemicals	-504.9	-506.5	-551.9	-551.9	-551.9
Rubber, plastics	-246.5	-246.8	-266.4	-266.4	-266.4
Hides, leather prods.	-18.8	-30.1	-30.1	-30.1	-30.1
Cork, wood articles	-46.8	-53.7	-84.2	-84.2	-84.2
Pulp, paper prods.	-71.7	-85.3	-117.9	-117.9	-117.9
Textiles, apparel	-500.3	-535.9	-445.7	-496.4	-712.9
Footwear, made-up articles	-50.1	-61.1	-50.2	-61.5	-80.0
Stone, mineral prods.	-110.5	-118.9	-162.6	-162.6	-162.6
Precious stones, jewellery	-222.1	-242.6	-347.0	-347.0	-347.0
Base metals, metal prods.	-410.5	-431.8	-523.9	-523.9	-523.9
Machinery	-839.3	-956.3	-1,562.3	-1,562.3	-1,562.3
Transport equip.	-498.7	-579.2	-993.6	-993.6	-993.6
Professional equip.	-111.5	-127.1	-203.0	-203.0	-203.0
Arms, ammunition	-5.5	-20.4	-20.4	-20.4	-20.4
Miscellaneous manufs.	-171.1	-186.1	-255.4	-255.4	-255.4
Works of art	-13.5	-15.0	-20.4	-20.4	-20.4
All products	-5,845.3	-6,355.5	-8,120.5	-8,403.5	-8,709.7

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 22. European Union: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	0.0	0.0	0.3	0.2	-1.9
<u>Change in Real Exports</u>					
Live animals, animal prods.	5.9	34.2	1,280.4	775.5	857.3
Vegetable prods.	3.7	26.3	1,246.3	1,223.2	739.3
Fats, oils	-2.1	9.5	234.0	100.2	145.9
Manufactured foodstuffs	104.7	58.8	3,312.9	4,834.5	3,144.1
Mineral prods.	-125.8	-125.0	-347.0	-320.4	352.2
Chemicals	-68.5	-47.8	-355.0	148.3	5,170.0
Rubber, plastics	-15.5	-15.2	-224.2	171.9	2,391.8
Hides, leather prods.	5.5	1.0	249.8	87.4	266.8
Cork, wood articles	7.0	-0.3	482.2	452.9	349.3
Pulp, paper prods.	-5.9	-1.9	-49.5	-65.2	942.7
Textiles, apparel	23.6	11.0	6,141.1	6,207.3	2,969.4
Footwear, made-up articles	10.9	3.8	741.7	759.6	451.3
Stone, mineral prods.	2.7	11.8	2.3	-19.4	727.6
Precious stones, jewellery	13.3	13.6	326.4	300.0	528.4
Base metals, metal prods.	-24.1	-15.7	-383.8	-328.7	2,846.6
Machinery	14.1	25.7	-1,080.7	-979.5	11,249.6
Transport equip.	-8.9	-18.3	-513.2	-475.5	6,122.6
Professional equip.	2.6	5.5	1,743.6	1,748.1	1,395.7
Arms, ammunition	-1.0	1.0	-5.1	0.4	23.8
Miscellaneous manufs.	32.3	9.3	984.7	996.0	874.0
Works of art	6.8	-3.4	1,618.3	1,642.3	1,351.5
All products	-18.7	-16.2	15,405.3	17,258.8	42,900.0
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	-7.5	-43.6	552.9	1,177.3	1,072.3
Vegetable prods.	-4.4	-30.8	445.9	472.4	1,034.0
Fats, oils	3.2	-14.3	121.3	324.3	254.0
Manufactured foodstuffs	-137.2	-77.2	6,334.0	4,296.7	6,565.3
Mineral prods.	460.8	457.8	1,446.3	1,311.6	-887.8
Chemicals	90.6	63.3	919.9	2,399.5	6,446.8
Rubber, plastics	22.9	22.5	368.6	1,837.2	3,533.3
Hides, leather prods.	-7.3	-1.4	146.5	361.2	121.5
Cork, wood articles	-11.3	0.4	240.0	206.5	274.0
Pulp, paper prods.	7.0	2.3	408.9	276.3	-77.3
Textiles, apparel	-44.1	-20.6	2,288.4	2,169.9	8,194.7
Footwear, made-up articles	-23.4	-8.2	376.4	338.6	1,003.9
Stone, mineral prods.	-4.1	-17.8	193.1	81.2	781.4
Precious stones, jewellery	-32.8	-33.5	330.1	271.1	-704.0
Base metals, metal prods.	49.1	32.0	806.6	680.1	2,540.6
Machinery	-34.1	-62.3	4,725.1	3,738.7	4,911.5
Transport equip.	19.5	39.9	2,696.7	1,924.7	5,530.8
Professional equip.	-5.6	-11.9	847.3	802.8	1,523.1
Arms, ammunition	0.5	-0.5	3.6	24.4	8.4
Miscellaneous manufs.	-48.0	-13.8	555.3	485.5	596.3
Works of art	-6.8	3.4	745.7	719.0	1,006.1
All products	286.8	285.8	24,552.6	23,899.0	43,728.8
<u>Trade Diversion</u>					
Live animals, animal prods.	0.0	0.0	0.0	31.2	0.0
Vegetable prods.	0.0	0.0	20.1	20.0	0.0
Fats, oils	0.0	0.0	13.4	11.1	0.0
Manufactured foodstuffs	0.0	0.0	44.7	53.7	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	0.0	0.0	0.0	0.0	0.0
Rubber, plastics	0.0	0.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.0	2.8	0.0
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.0	0.0	0.0	0.0	0.0
Textiles, apparel	0.0	0.0	150.9	152.2	0.0
Footwear, made-up articles	0.0	0.0	1.3	1.3	0.0
Stone, mineral prods.	0.0	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.0	0.0	0.0
Base metals, metal prods.	0.0	0.0	0.0	0.0	0.0
Machinery	0.0	0.0	0.0	0.0	0.0
Transport equip.	0.0	0.0	0.0	0.0	0.0
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.0	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	0.0	0.0	230.4	272.3	0.0

APPENDIX: Table 22 (Cont.). European Union: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	-7.5	-43.6	552.9	1,146.1	1,072.3
Vegetable prods.	-4.4	-30.8	425.9	452.4	1,034.0
Fats, oils	3.2	-14.3	107.9	313.2	254.0
Manufactured foodstuffs	-137.2	-77.2	6,289.3	4,242.9	6,565.3
Mineral prods.	460.8	457.8	1,446.3	1,311.6	-887.8
Chemicals	90.6	63.3	919.9	2,399.5	6,446.8
Rubber, plastics	22.9	22.5	368.6	1,837.2	3,533.3
Hides, leather prods.	-7.3	-1.4	146.5	358.4	121.5
Cork, wood articles	-11.3	0.4	240.0	206.5	274.0
Pulp, paper prods.	7.0	2.3	408.9	276.3	-77.3
Textiles, apparel	-44.1	-20.6	2,137.5	2,017.7	8,194.7
Footwear, made-up articles	-23.4	-8.2	375.1	337.3	1,003.9
Stone, mineral prods.	-4.1	-17.8	193.1	81.2	781.4
Precious stones, jewellery	-32.8	-33.5	330.1	271.1	-704.0
Base metals, metal prods.	49.1	32.0	806.6	680.1	2,540.6
Machinery	-34.1	-62.3	4,725.1	3,738.7	4,911.5
Transport equip.	19.5	39.9	2,696.7	1,924.7	5,530.8
Professional equip.	-5.6	-11.9	847.3	802.8	1,523.1
Arms, ammunition	0.5	-0.5	3.6	24.4	8.4
Miscellaneous manufs.	-48.0	-13.8	555.3	485.5	596.3
Works of art	-6.8	3.4	745.7	719.0	1,006.1
All products	286.8	285.8	24,322.2	23,626.7	43,728.8
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	-0.3	-1.9	27.4	14.0	11.7
Vegetable prods.	-0.2	-1.5	2.7	3.0	14.2
Fats, oils	0.2	-0.7	0.9	5.8	3.6
Manufactured foodstuffs	-17.8	-10.0	243.4	115.8	260.6
Mineral prods.	0.7	0.7	7.0	5.7	2.8
Chemicals	3.8	2.7	1.4	9.4	66.0
Rubber, plastics	1.1	1.0	0.5	11.3	41.2
Hides, leather prods.	-0.2	0.0	4.0	3.2	0.4
Cork, wood articles	-0.3	0.0	7.7	6.5	1.3
Pulp, paper prods.	0.1	0.0	1.0	0.5	0.0
Textiles, apparel	-3.3	-1.5	14.9	13.4	180.7
Footwear, made-up articles	-1.2	-0.4	1.9	1.5	13.1
Stone, mineral prods.	-0.1	-0.6	0.4	0.1	5.9
Precious stones, jewellery	-0.2	-0.2	2.9	2.3	3.0
Base metals, metal prods.	1.4	0.9	1.1	0.8	10.7
Machinery	-0.7	-1.3	7.6	4.8	8.2
Transport equip.	0.5	1.1	5.3	2.7	22.1
Professional equip.	-0.2	-0.4	28.3	26.7	7.9
Arms, ammunition	0.0	0.0	0.0	0.4	0.0
Miscellaneous manufs.	-1.3	-0.4	17.3	14.9	2.6
Works of art	-0.2	0.1	26.1	25.0	6.6
All products	-18.4	-12.7	401.6	267.8	662.5
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	7.9	45.6	1,735.5	1,044.3	1,155.7
Vegetable prods.	5.0	35.1	1,693.6	1,661.6	996.9
Fats, oils	-2.8	12.6	318.0	134.8	196.9
Manufactured foodstuffs	139.6	78.5	4,531.4	6,689.6	4,295.0
Mineral prods.	-251.2	-249.6	-691.1	-638.2	707.6
Chemicals	-68.5	-47.8	-354.7	148.4	5,225.8
Rubber, plastics	-15.5	-15.2	-223.9	172.1	2,419.4
Hides, leather prods.	5.5	1.0	251.9	87.6	269.1
Cork, wood articles	7.0	-0.3	488.5	458.4	352.6
Pulp, paper prods.	-5.9	-1.9	-49.4	-65.2	949.0
Textiles, apparel	23.6	11.0	6,330.4	6,400.8	3,013.7
Footwear, made-up articles	10.9	3.8	757.1	775.8	457.0
Stone, mineral prods.	2.7	11.8	2.3	-19.4	735.2
Precious stones, jewellery	13.3	13.6	327.9	301.3	532.4
Base metals, metal prods.	-24.1	-15.7	-383.3	-328.4	2,873.7
Machinery	14.1	25.7	-1,079.8	-978.8	11,352.4
Transport equip.	-8.9	-18.3	-512.8	-475.1	6,181.1
Professional equip.	2.6	5.5	1,765.6	1,770.2	1,409.8
Arms, ammunition	-1.0	1.0	-5.1	0.4	24.0
Miscellaneous manufs.	32.3	9.3	995.0	1,006.5	882.1
Works of art	6.8	-3.4	1,635.1	1,659.5	1,363.2
All products	-106.5	-97.7	17,532.2	19,806.2	45,392.6

APPENDIX: Table 22 (Cont.). European Union: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	0.0	0.0	0.0	9.1	0.0
Vegetable prods.	0.0	0.0	12.1	11.4	0.0
Fats, oils	0.0	0.0	7.5	1.6	0.0
Manufactured foodstuffs	0.0	0.0	15.7	43.4	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	0.0	0.0	0.0	0.0	0.0
Rubber, plastics	0.0	0.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.0	0.3	0.0
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.0	0.0	0.0	0.0	0.0
Textiles, apparel	0.0	0.0	90.6	90.7	0.0
Footwear, made-up articles	0.0	0.0	0.6	0.6	0.0
Stone, mineral prods.	0.0	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.0	0.0	0.0
Base metals, metal prods.	0.0	0.0	0.0	0.0	0.0
Machinery	0.0	0.0	0.0	0.0	0.0
Transport equip.	0.0	0.0	0.0	0.0	0.0
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.0	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	0.0	0.0	126.5	157.2	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	7.5	43.7	1,762.9	1,049.3	1,167.4
Vegetable prods.	4.7	33.5	1,684.1	1,653.2	1,011.1
Fats, oils	-2.7	11.9	311.4	139.0	200.5
Manufactured foodstuffs	121.8	68.4	4,759.2	6,761.9	4,555.6
Mineral prods.	-250.5	-248.9	-684.1	-632.4	710.4
Chemicals	-64.6	-45.2	-353.3	157.7	5,291.8
Rubber, plastics	-14.4	-14.2	-223.4	183.4	2,460.6
Hides, leather prods.	5.3	1.0	255.9	90.6	269.5
Cork, wood articles	6.7	-0.2	496.1	464.9	353.9
Pulp, paper prods.	-5.8	-1.9	-48.4	-64.7	949.1
Textiles, apparel	20.3	9.5	6,254.7	6,323.4	3,194.4
Footwear, made-up articles	9.7	3.4	758.4	776.7	470.0
Stone, mineral prods.	2.6	11.1	2.7	-19.4	741.2
Precious stones, jewellery	13.1	13.4	330.8	303.6	535.3
Base metals, metal prods.	-22.7	-14.9	-382.2	-327.6	2,884.4
Machinery	13.3	24.4	-1,072.2	-974.0	11,360.6
Transport equip.	-8.4	-17.2	-507.5	-472.4	6,203.1
Professional equip.	2.4	5.1	1,793.9	1,796.9	1,417.6
Arms, ammunition	-0.9	1.0	-5.1	0.8	24.0
Miscellaneous manufs.	31.0	8.9	1,012.3	1,021.4	884.7
Works of art	6.6	-3.3	1,661.1	1,684.5	1,369.7
All products	-124.9	-110.4	17,807.4	19,916.8	46,055.0
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-0.1	0.1	4.1	38.9	-2,369.9
Vegetable prods.	0.0	0.6	-15.4	-8.7	-2,847.8
Fats, oils	0.0	-0.1	-5.1	13.0	-437.0
Manufactured foodstuffs	-1.7	-1.2	1,020.0	450.4	-10,172.3
Mineral prods.	-491.1	-491.1	-491.1	-491.1	-491.1
Chemicals	1.1	0.6	-8,420.0	-8,420.0	-8,420.0
Rubber, plastics	0.2	0.2	-4,448.0	-4,448.0	-4,448.0
Hides, leather prods.	-0.1	0.0	1.8	8.2	-363.5
Cork, wood articles	-0.1	0.0	2.8	2.5	-717.5
Pulp, paper prods.	0.0	0.0	-775.5	-775.5	-775.5
Textiles, apparel	-1.5	-0.9	-8.4	-13.8	-9,085.6
Footwear, made-up articles	-0.6	-0.2	11.2	10.0	-1,062.8
Stone, mineral prods.	-0.1	-0.4	-928.5	-928.5	-928.5
Precious stones, jewellery	-0.1	-0.1	1.9	1.6	-259.4
Base metals, metal prods.	0.6	0.3	-4,003.7	-4,003.7	-4,003.7
Machinery	-0.9	-1.4	-12,296.3	-12,296.3	-12,296.3
Transport equip.	0.0	0.3	-7,581.6	-7,581.6	-7,581.6
Professional equip.	-0.2	-0.3	19.1	17.9	-2,166.7
Arms, ammunition	0.0	0.0	-26.6	-26.6	-26.6
Miscellaneous manufs.	-0.4	-0.2	7.7	6.9	-1,377.5
Works of art	-0.1	-0.1	6.1	5.5	-2,376.4
All products	-495.0	-493.9	-37,925.5	-38,438.9	-72,207.8

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 23. Bahrain: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-5.1	-4.9	-6.8	-6.8	-7.9
<u>Change in Real Exports</u>					
Live animals, animal prods.	0.8	0.5	0.9	0.8	0.7
Vegetable prods.	0.1	0.1	0.1	0.1	0.1
Fats, oils	0.5	0.3	0.6	0.5	0.4
Manufactured foodstuffs	1.4	1.9	1.7	2.0	1.5
Mineral prods.	106.7	102.4	139.9	141.4	155.8
Chemicals	13.9	12.3	9.7	10.0	11.5
Rubber, plastics	2.8	2.4	1.9	2.0	2.3
Hides, leather prods.	0.1	0.1	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	3.1	2.6	2.2	2.2	2.3
Textiles, apparel	40.3	35.4	53.6	53.9	36.4
Footwear, made-up articles	0.3	0.2	0.3	0.3	0.2
Stone, mineral prods.	0.3	0.2	0.2	0.2	0.2
Precious stones, jewellery	0.8	0.7	0.6	0.6	0.6
Base metals, metal prods.	89.1	75.3	61.1	61.5	71.2
Machinery	2.9	2.5	2.0	2.0	2.3
Transport equip.	1.4	1.2	1.0	1.0	1.1
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.3	1.2	1.2	1.2	1.1
Works of art	0.0	0.0	0.0	0.0	0.0
All products	265.9	239.3	277.2	279.8	287.9
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	6.0	11.6	5.5	8.6	8.2
Vegetable prods.	3.5	7.6	2.6	6.4	5.1
Fats, oils	2.0	2.8	1.8	2.3	2.2
Manufactured foodstuffs	23.6	15.9	18.9	13.8	21.8
Mineral prods.	11.8	14.9	-14.3	-15.8	-23.1
Chemicals	38.0	45.8	58.3	56.8	49.5
Rubber, plastics	9.4	11.1	14.1	13.5	11.8
Hides, leather prods.	-0.9	-0.4	-0.8	-0.6	-0.7
Cork, wood articles	-0.3	0.2	-0.2	-0.1	0.5
Pulp, paper prods.	4.6	6.4	7.6	7.6	7.2
Textiles, apparel	25.1	29.9	21.8	25.4	28.9
Footwear, made-up articles	3.0	3.8	2.7	3.3	3.6
Stone, mineral prods.	17.8	20.1	23.6	23.7	21.4
Precious stones, jewellery	6.3	6.9	7.2	7.3	7.5
Base metals, metal prods.	3.4	9.0	4.7	4.6	10.6
Machinery	44.4	61.8	90.7	90.4	75.5
Transport equip.	-12.1	-5.0	6.7	6.6	0.1
Professional equip.	2.3	3.6	2.7	2.7	4.4
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	18.8	20.4	19.9	19.9	21.6
Works of art	0.0	0.0	0.0	0.0	0.0
All products	206.9	266.4	273.3	276.2	256.0
<u>Trade Diversion</u>					
Live animals, animal prods.	1.3	0.7	51.4	0.0	0.0
Vegetable prods.	0.6	0.3	0.0	0.0	0.0
Fats, oils	0.1	0.1	0.0	0.0	0.0
Manufactured foodstuffs	1.2	1.5	7.8	11.3	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	29.5	24.5	0.0	0.0	0.0
Rubber, plastics	6.4	5.3	0.0	0.0	0.0
Hides, leather prods.	0.1	0.0	5.7	0.0	0.0
Cork, wood articles	0.0	0.0	22.4	21.1	0.0
Pulp, paper prods.	1.3	1.0	0.0	0.0	0.0
Textiles, apparel	3.6	2.9	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	2.0	1.6	0.0	0.0	0.0
Precious stones, jewellery	0.1	0.1	2.7	2.4	0.0
Base metals, metal prods.	6.6	5.2	0.0	0.0	0.0
Machinery	1.9	1.5	0.0	0.0	0.0
Transport equip.	1.3	1.0	0.0	0.0	0.0
Professional equip.	0.1	0.1	48.8	49.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.4	0.3	52.5	53.1	0.0
Works of art	0.0	0.0	0.5	0.5	0.0
All products	56.6	46.1	191.7	137.5	0.0

APPENDIX: Table 23 (Cont.). Bahrain: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	4.7	10.9	-45.9	8.6	8.2
Vegetable prods.	2.9	7.3	2.6	6.4	5.1
Fats, oils	1.8	2.7	1.8	2.3	2.2
Manufactured foodstuffs	22.5	14.4	11.1	2.4	21.8
Mineral prods.	11.8	14.9	-14.3	-15.8	-23.1
Chemicals	8.5	21.3	58.3	56.8	49.5
Rubber, plastics	2.9	5.9	14.1	13.5	11.8
Hides, leather prods.	-0.9	-0.5	-6.5	-0.6	-0.7
Cork, wood articles	-0.4	0.1	-22.6	-21.2	0.5
Pulp, paper prods.	3.3	5.3	7.6	7.6	7.2
Textiles, apparel	21.4	27.0	21.8	25.4	28.9
Footwear, made-up articles	3.0	3.8	2.7	3.3	3.6
Stone, mineral prods.	15.9	18.5	23.6	23.7	21.4
Precious stones, jewellery	6.2	6.8	4.6	4.8	7.5
Base metals, metal prods.	-3.2	3.8	4.7	4.6	10.6
Machinery	42.5	60.3	90.7	90.4	75.5
Transport equip.	-13.4	-6.0	6.7	6.6	0.1
Professional equip.	2.3	3.5	-46.1	-46.3	4.4
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	18.4	20.1	-32.6	-33.3	21.6
Works of art	0.0	0.0	-0.5	-0.5	0.0
All products	150.3	220.3	81.5	138.8	256.0
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	0.4	0.6	0.1	0.4	0.3
Vegetable prods.	0.2	0.4	0.2	0.3	0.1
Fats, oils	0.2	0.3	0.2	0.2	0.2
Manufactured foodstuffs	2.5	2.0	0.9	0.5	1.2
Mineral prods.	0.0	0.1	0.1	0.1	0.2
Chemicals	1.6	2.2	2.8	2.7	2.1
Rubber, plastics	0.4	0.6	0.7	0.7	0.5
Hides, leather prods.	0.0	0.0	0.0	0.0	0.0
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.3	0.4	0.3	0.3	0.3
Textiles, apparel	1.9	2.2	1.8	1.9	1.2
Footwear, made-up articles	0.3	0.4	0.3	0.3	0.2
Stone, mineral prods.	1.7	1.9	1.6	1.6	1.4
Precious stones, jewellery	0.9	0.9	0.7	0.7	0.7
Base metals, metal prods.	0.1	0.3	0.0	0.0	0.2
Machinery	2.9	3.8	3.0	2.9	2.1
Transport equip.	-0.4	-0.2	0.0	0.0	0.0
Professional equip.	0.1	0.2	0.0	0.0	0.1
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	2.6	2.7	1.9	1.9	2.2
Works of art	0.0	0.0	0.0	0.0	0.0
All products	15.8	18.7	14.7	14.6	12.9
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	1.2	0.7	1.2	1.1	1.0
Vegetable prods.	0.1	0.1	0.1	0.1	0.1
Fats, oils	0.7	0.4	0.8	0.6	0.6
Manufactured foodstuffs	2.0	2.7	2.4	2.9	2.2
Mineral prods.	218.9	209.8	289.1	292.2	323.1
Chemicals	14.7	12.8	10.1	10.4	12.0
Rubber, plastics	2.9	2.5	2.0	2.1	2.4
Hides, leather prods.	0.1	0.1	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	3.3	2.7	2.3	2.3	2.4
Textiles, apparel	42.4	37.1	57.4	57.7	38.2
Footwear, made-up articles	0.3	0.2	0.3	0.3	0.3
Stone, mineral prods.	0.3	0.3	0.2	0.2	0.2
Precious stones, jewellery	0.8	0.7	0.6	0.6	0.6
Base metals, metal prods.	93.9	78.6	63.4	63.7	74.3
Machinery	3.0	2.6	2.1	2.1	2.4
Transport equip.	1.5	1.3	1.0	1.0	1.2
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.4	1.2	1.3	1.3	1.1
Works of art	0.0	0.0	0.0	0.0	0.0
All products	387.5	353.9	434.5	438.9	462.0

APPENDIX: Table 23 (Cont.). Bahrain: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	0.9	0.1	6.2	0.0	0.0
Vegetable prods.	0.4	0.1	0.0	0.0	0.0
Fats, oils	0.1	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.8	1.5	6.2	16.8	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	16.7	13.0	0.0	0.0	0.0
Rubber, plastics	3.9	3.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.1	0.0	0.0
Cork, wood articles	0.0	0.0	1.2	1.1	0.0
Pulp, paper prods.	0.7	0.5	0.0	0.0	0.0
Textiles, apparel	1.9	1.5	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	1.0	0.8	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.3	0.3	0.0
Base metals, metal prods.	3.2	2.2	0.0	0.0	0.0
Machinery	1.1	0.9	0.0	0.0	0.0
Transport equip.	0.8	0.7	0.0	0.0	0.0
Professional equip.	0.0	0.0	1.6	1.6	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.2	0.2	2.8	2.7	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	31.8	24.5	18.5	22.5	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	0.7	1.2	-4.9	1.5	1.3
Vegetable prods.	0.0	0.4	0.3	0.4	0.3
Fats, oils	0.9	0.6	1.0	0.8	0.8
Manufactured foodstuffs	3.7	3.2	-2.9	-13.4	3.4
Mineral prods.	218.9	209.9	289.1	292.3	323.3
Chemicals	-0.4	2.0	12.9	13.1	14.1
Rubber, plastics	-0.6	0.1	2.7	2.8	2.9
Hides, leather prods.	0.1	0.1	0.0	0.1	0.1
Cork, wood articles	0.0	0.0	-1.2	-1.1	0.0
Pulp, paper prods.	2.9	2.6	2.6	2.6	2.7
Textiles, apparel	42.4	37.8	59.2	59.7	39.3
Footwear, made-up articles	0.6	0.6	0.6	0.6	0.5
Stone, mineral prods.	1.0	1.4	1.8	1.8	1.6
Precious stones, jewellery	1.6	1.6	1.1	1.1	1.3
Base metals, metal prods.	90.8	76.7	63.4	63.8	74.4
Machinery	4.8	5.6	5.0	5.0	4.5
Transport equip.	0.2	0.5	1.0	1.0	1.2
Professional equip.	0.1	0.2	-1.6	-1.6	0.1
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.8	3.8	0.4	0.5	3.3
Works of art	0.0	0.0	0.0	0.0	0.0
All products	371.5	348.1	430.7	431.0	475.0
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-15.5	-20.5	-21.6	-20.4	-21.6
Vegetable prods.	-13.9	-19.5	-13.7	-19.5	-20.8
Fats, oils	-2.7	-3.3	-2.6	-3.3	-3.3
Manufactured foodstuffs	-35.0	-27.9	-44.9	-44.9	-44.9
Mineral prods.	-114.2	-114.2	-114.2	-114.2	-114.2
Chemicals	-63.0	-63.1	-66.9	-66.9	-66.9
Rubber, plastics	-14.6	-14.6	-15.4	-15.4	-15.4
Hides, leather prods.	0.3	0.0	0.0	0.0	0.0
Cork, wood articles	-1.7	-2.1	-3.5	-3.5	-3.5
Pulp, paper prods.	-8.2	-9.1	-11.2	-11.2	-11.2
Textiles, apparel	-33.2	-35.1	-30.6	-33.1	-43.7
Footwear, made-up articles	-2.5	-2.8	-2.5	-2.9	-3.4
Stone, mineral prods.	-13.8	-14.4	-17.6	-17.6	-17.6
Precious stones, jewellery	-3.3	-3.5	-4.3	-4.3	-4.3
Base metals, metal prods.	-16.0	-16.8	-19.9	-19.9	-19.9
Machinery	-46.6	-51.3	-73.7	-73.7	-73.7
Transport equip.	-10.4	-12.4	-21.7	-21.7	-21.7
Professional equip.	-4.0	-4.4	-6.5	-6.5	-6.5
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-18.2	-19.1	-22.7	-22.7	-22.7
Works of art	0.0	0.0	-0.1	-0.1	-0.1
All products	-416.7	-434.4	-493.6	-501.8	-515.5

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 24. Kuwait: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-0.8	-0.3	-2.6	-2.6	-3.4
<u>Change in Real Exports</u>					
Live animals, animal prods.	0.4	0.1	0.4	0.3	0.2
Vegetable prods.	0.0	0.0	0.0	0.0	0.0
Fats, oils	0.0	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.1	0.2	0.2	0.2	0.1
Mineral prods.	31.8	-2.7	132.0	133.9	158.1
Chemicals	11.3	8.3	5.4	5.7	7.3
Rubber, plastics	13.7	10.0	6.3	7.2	9.1
Hides, leather prods.	0.1	0.0	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.2	0.1	0.1	0.1	0.1
Textiles, apparel	1.3	0.9	2.0	2.0	1.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.2	0.1	0.1	0.1	0.1
Precious stones, jewellery	0.6	0.5	0.4	0.4	0.3
Base metals, metal prods.	1.0	0.7	0.4	0.4	0.6
Machinery	4.0	2.9	1.8	1.8	2.3
Transport equip.	0.5	0.3	0.2	0.2	0.3
Professional equip.	0.5	0.4	0.5	0.5	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.1	0.0	0.1	0.1	0.0
Works of art	3.9	2.7	3.3	3.3	2.2
All products	69.7	24.6	153.6	156.5	182.2
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	-8.4	-0.6	-9.2	-5.1	-5.1
Vegetable prods.	-3.6	-0.3	-4.3	-1.4	-2.2
Fats, oils	-1.7	-0.1	-1.9	-1.0	-1.2
Manufactured foodstuffs	7.1	-1.0	1.5	-4.3	5.8
Mineral prods.	1.4	1.7	0.7	0.7	0.6
Chemicals	-8.4	-1.2	6.0	5.1	1.3
Rubber, plastics	-4.0	-0.6	3.0	2.2	0.3
Hides, leather prods.	-0.9	0.7	-0.5	0.0	-0.2
Cork, wood articles	-1.1	-0.2	-0.9	-0.8	0.3
Pulp, paper prods.	-3.0	-0.3	0.7	0.8	0.6
Textiles, apparel	-9.4	-1.5	-13.7	-8.9	-2.9
Footwear, made-up articles	-2.2	-0.2	-3.0	-1.6	-0.9
Stone, mineral prods.	-4.5	-0.8	2.7	3.0	0.8
Precious stones, jewellery	-0.6	-0.1	0.0	0.1	0.3
Base metals, metal prods.	-13.2	-1.7	6.2	6.2	1.0
Machinery	-54.0	-8.6	39.1	39.8	18.8
Transport equip.	-42.0	-6.5	30.1	30.7	12.6
Professional equip.	-5.3	-0.9	-4.4	-4.3	1.2
Arms, ammunition	-1.2	-0.1	-0.5	-0.6	-0.7
Miscellaneous manufs.	-3.6	-0.6	-2.0	-2.0	1.1
Works of art	-1.2	-0.2	-0.8	-0.8	0.3
All products	-159.8	-23.1	48.8	57.9	32.2
<u>Trade Diversion</u>					
Live animals, animal prods.	1.7	0.9	66.4	0.0	0.0
Vegetable prods.	0.4	0.2	0.0	0.0	0.0
Fats, oils	0.3	0.1	0.0	0.0	0.0
Manufactured foodstuffs	1.4	1.8	9.0	13.1	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	21.3	17.9	0.0	0.0	0.0
Rubber, plastics	9.0	7.5	0.0	0.0	0.0
Hides, leather prods.	0.3	0.1	20.4	0.0	0.0
Cork, wood articles	0.1	0.1	32.1	30.2	0.0
Pulp, paper prods.	1.9	1.5	0.0	0.0	0.0
Textiles, apparel	7.1	5.9	0.0	0.0	0.0
Footwear, made-up articles	0.1	0.1	0.0	0.0	0.0
Stone, mineral prods.	2.5	2.1	0.0	0.0	0.0
Precious stones, jewellery	0.1	0.0	1.9	1.8	0.0
Base metals, metal prods.	16.4	13.2	0.0	0.0	0.0
Machinery	3.7	3.0	0.0	0.0	0.0
Transport equip.	5.0	3.9	0.0	0.0	0.0
Professional equip.	0.2	0.1	131.3	131.9	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.7	0.6	78.6	79.6	0.0
Works of art	0.8	0.6	61.3	61.3	0.0
All products	72.8	59.7	401.2	318.0	0.0

APPENDIX: Table 24 (Cont.). Kuwait: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	-10.2	-1.5	-75.6	-5.1	-5.1
Vegetable prods.	-4.0	-0.5	-4.3	-1.4	-2.2
Fats, oils	-1.9	-0.3	-1.9	-1.0	-1.2
Manufactured foodstuffs	5.7	-2.8	-7.5	-17.4	5.8
Mineral prods.	1.4	1.7	0.7	0.7	0.6
Chemicals	-29.8	-19.1	6.0	5.1	1.3
Rubber, plastics	-13.0	-8.1	3.0	2.2	0.3
Hides, leather prods.	-1.2	0.6	-21.0	0.0	-0.2
Cork, wood articles	-1.1	-0.2	-33.0	-31.0	0.3
Pulp, paper prods.	-4.9	-1.9	0.7	0.8	0.6
Textiles, apparel	-16.5	-7.4	-13.7	-8.9	-2.9
Footwear, made-up articles	-2.3	-0.3	-3.0	-1.6	-0.9
Stone, mineral prods.	-7.0	-2.9	2.7	3.0	0.8
Precious stones, jewellery	-0.7	-0.2	-1.9	-1.7	0.3
Base metals, metal prods.	-29.6	-14.9	6.2	6.2	1.0
Machinery	-57.6	-11.6	39.1	39.8	18.8
Transport equip.	-47.0	-10.4	30.1	30.7	12.6
Professional equip.	-5.4	-1.0	-135.7	-136.2	1.2
Arms, ammunition	-1.2	-0.1	-0.5	-0.6	-0.7
Miscellaneous manufs.	-4.3	-1.1	-80.7	-81.7	1.1
Works of art	-2.1	-0.8	-62.1	-62.1	0.3
All products	-232.7	-82.7	-352.4	-260.0	32.2
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	-0.1	0.0	0.3	0.0	0.1
Vegetable prods.	-0.1	0.0	-0.1	0.0	0.0
Fats, oils	0.0	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.4	-0.1	0.0	0.0	0.1
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	0.0	0.0	0.0	0.0	0.0
Rubber, plastics	0.0	0.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.0	0.0	0.0
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	-0.1	0.0	0.0	0.0	0.0
Textiles, apparel	-0.3	0.0	-0.5	-0.3	0.0
Footwear, made-up articles	-0.1	0.0	-0.1	0.0	0.0
Stone, mineral prods.	-0.1	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.0	0.0	0.0
Base metals, metal prods.	-0.2	0.0	0.0	0.0	0.0
Machinery	-2.1	-0.3	0.2	0.3	0.1
Transport equip.	-1.6	-0.2	0.2	0.2	0.0
Professional equip.	-0.2	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-0.1	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	-4.6	-0.8	0.2	0.4	0.3
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	0.5	0.1	0.5	0.4	0.3
Vegetable prods.	0.0	0.0	0.1	0.1	0.0
Fats, oils	0.0	0.0	0.1	0.0	0.0
Manufactured foodstuffs	0.2	0.3	0.3	0.3	0.2
Mineral prods.	63.8	-5.4	266.8	270.6	320.1
Chemicals	11.7	8.5	5.5	5.8	7.4
Rubber, plastics	14.1	10.2	6.4	7.3	9.3
Hides, leather prods.	0.1	0.0	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.2	0.1	0.1	0.1	0.1
Textiles, apparel	1.3	1.0	2.1	2.1	1.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.2	0.1	0.1	0.1	0.1
Precious stones, jewellery	0.6	0.5	0.4	0.4	0.3
Base metals, metal prods.	1.0	0.7	0.4	0.4	0.6
Machinery	4.1	3.0	1.9	1.9	2.3
Transport equip.	0.5	0.3	0.2	0.2	0.3
Professional equip.	0.5	0.4	0.5	0.5	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.1	0.0	0.1	0.1	0.0
Works of art	4.0	2.7	3.4	3.4	2.2
All products	103.0	22.6	288.9	293.9	344.8

APPENDIX: Table 24 (Cont.). Kuwait: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	1.2	0.2	8.1	0.0	0.0
Vegetable prods.	0.3	0.0	0.0	0.0	0.0
Fats, oils	0.2	0.0	0.0	0.0	0.0
Manufactured foodstuffs	1.0	1.8	7.2	19.5	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	11.7	9.2	0.0	0.0	0.0
Rubber, plastics	5.1	4.0	0.0	0.0	0.0
Hides, leather prods.	0.1	0.0	0.5	0.0	0.0
Cork, wood articles	0.0	0.0	1.7	1.6	0.0
Pulp, paper prods.	1.0	0.7	0.0	0.0	0.0
Textiles, apparel	3.7	2.9	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	1.2	1.0	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.2	0.2	0.0
Base metals, metal prods.	8.0	5.7	0.0	0.0	0.0
Machinery	2.1	1.7	0.0	0.0	0.0
Transport equip.	3.3	2.6	0.0	0.0	0.0
Professional equip.	0.1	0.1	4.4	4.4	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.4	0.3	4.1	4.0	0.0
Works of art	0.5	0.4	1.8	1.8	0.0
All products	40.1	30.5	28.1	31.5	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	-0.8	-0.1	-7.3	0.4	0.4
Vegetable prods.	-0.3	0.0	0.0	0.1	0.1
Fats, oils	-0.1	0.0	0.0	0.1	0.1
Manufactured foodstuffs	-0.4	-1.6	-6.9	-19.1	0.3
Mineral prods.	63.8	-5.3	266.8	270.6	320.1
Chemicals	-0.1	-0.8	5.5	5.8	7.4
Rubber, plastics	9.0	6.2	6.4	7.3	9.3
Hides, leather prods.	0.0	0.0	-0.4	0.1	0.1
Cork, wood articles	-0.1	0.0	-1.7	-1.6	0.0
Pulp, paper prods.	-0.9	-0.5	0.1	0.1	0.1
Textiles, apparel	-2.6	-1.9	1.6	1.9	1.0
Footwear, made-up articles	-0.1	0.0	-0.1	0.0	0.0
Stone, mineral prods.	-1.2	-0.9	0.1	0.1	0.1
Precious stones, jewellery	0.6	0.4	0.2	0.2	0.3
Base metals, metal prods.	-7.2	-5.1	0.5	0.5	0.6
Machinery	-0.1	1.0	2.1	2.1	2.4
Transport equip.	-4.4	-2.5	0.4	0.4	0.3
Professional equip.	0.2	0.3	-3.8	-3.8	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-0.5	-0.3	-4.1	-4.0	0.0
Works of art	3.4	2.3	1.6	1.6	2.2
All products	58.3	-8.7	261.1	262.8	345.1
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	6.4	-0.2	-1.5	0.0	-1.5
Vegetable prods.	4.2	0.0	4.4	0.0	-1.0
Fats, oils	1.1	0.0	1.3	0.0	0.0
Manufactured foodstuffs	-10.0	-1.9	-21.6	-21.6	-21.6
Mineral prods.	-2.0	-2.0	-2.0	-2.0	-2.0
Chemicals	-9.7	-9.8	-12.5	-12.5	-12.5
Rubber, plastics	-4.6	-4.7	-5.8	-5.8	-5.8
Hides, leather prods.	0.3	-0.6	-0.6	-0.6	-0.6
Cork, wood articles	0.4	0.0	-2.1	-2.1	-2.1
Pulp, paper prods.	0.4	-0.7	-3.3	-3.3	-3.3
Textiles, apparel	-0.7	-3.0	2.7	-0.5	-14.0
Footwear, made-up articles	0.7	0.0	0.7	-0.1	-1.3
Stone, mineral prods.	-0.2	-1.0	-5.1	-5.1	-5.1
Precious stones, jewellery	0.1	0.0	-0.6	-0.6	-0.6
Base metals, metal prods.	-4.5	-5.8	-11.2	-11.2	-11.2
Machinery	6.9	-2.2	-47.9	-47.9	-47.9
Transport equip.	4.4	-2.9	-39.2	-39.2	-39.2
Professional equip.	1.1	-0.1	-5.8	-5.8	-5.8
Arms, ammunition	1.3	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.9	-0.3	-5.8	-5.8	-5.8
Works of art	-0.7	-1.0	-2.3	-2.3	-2.3
All products	-4.3	-36.3	-158.2	-166.3	-183.6

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 25. Oman: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-2.9	-2.2	-5.0	-4.9	-5.8
<u>Change in Real Exports</u>					
Live animals, animal prods.	8.6	3.4	9.5	8.0	6.8
Vegetable prods.	3.2	1.3	3.8	3.8	2.6
Fats, oils	1.5	0.5	1.8	1.3	1.2
Manufactured foodstuffs	15.4	21.2	20.3	24.9	17.2
Mineral prods.	102.1	75.7	177.0	178.0	195.9
Chemicals	6.1	4.8	4.1	4.2	4.9
Rubber, plastics	4.4	3.4	2.8	3.0	3.5
Hides, leather prods.	0.1	0.0	0.1	0.0	0.0
Cork, wood articles	0.1	0.1	0.1	0.1	0.1
Pulp, paper prods.	0.7	0.5	0.4	0.4	0.5
Textiles, apparel	10.9	8.6	16.1	16.2	9.8
Footwear, made-up articles	0.2	0.1	0.3	0.3	0.2
Stone, mineral prods.	2.1	1.7	1.4	1.4	1.6
Precious stones, jewellery	0.6	0.5	0.5	0.5	0.5
Base metals, metal prods.	9.9	7.3	6.4	6.4	7.5
Machinery	17.2	13.5	11.3	11.2	12.8
Transport equip.	52.6	41.3	34.5	34.3	39.9
Professional equip.	1.7	1.3	1.7	1.7	1.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.0	2.3	2.8	2.8	2.2
Works of art	3.4	2.5	3.2	3.2	2.5
All products	243.8	190.0	298.1	301.7	311.1
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	4.8	17.7	2.6	9.2	9.0
Vegetable prods.	-4.6	2.9	-6.6	-0.4	-2.2
Fats, oils	-1.5	2.2	-2.5	-0.2	-0.6
Manufactured foodstuffs	102.4	81.6	84.8	69.2	95.8
Mineral prods.	3.8	4.9	0.4	0.3	-0.2
Chemicals	-3.3	4.1	8.5	7.7	3.8
Rubber, plastics	-4.7	-0.4	2.3	1.4	-1.0
Hides, leather prods.	0.4	1.0	0.5	0.7	0.6
Cork, wood articles	0.2	1.3	0.2	0.3	1.4
Pulp, paper prods.	-4.4	-1.8	-1.4	-1.3	-1.6
Textiles, apparel	0.5	5.5	-3.1	-0.3	3.0
Footwear, made-up articles	2.1	3.9	1.2	2.4	3.0
Stone, mineral prods.	-0.5	2.1	3.4	3.6	2.1
Precious stones, jewellery	10.0	13.1	13.0	13.2	14.4
Base metals, metal prods.	-13.1	1.4	6.8	6.8	0.2
Machinery	-1.2	45.6	75.6	76.3	54.3
Transport equip.	-36.2	6.4	32.8	33.6	11.8
Professional equip.	7.5	10.9	7.4	7.5	11.1
Arms, ammunition	0.1	0.1	0.1	0.1	0.1
Miscellaneous manufs.	4.3	6.3	4.8	4.9	6.6
Works of art	1.2	4.0	1.8	1.8	4.2
All products	67.8	212.8	232.6	236.7	215.9
<u>Trade Diversion</u>					
Live animals, animal prods.	2.1	1.1	104.9	0.0	0.0
Vegetable prods.	0.8	0.4	0.0	0.0	0.0
Fats, oils	0.6	0.3	0.0	0.0	0.0
Manufactured foodstuffs	2.3	2.9	24.1	35.1	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	20.1	16.8	0.0	0.0	0.0
Rubber, plastics	10.8	8.9	0.0	0.0	0.0
Hides, leather prods.	0.1	0.1	8.4	0.0	0.0
Cork, wood articles	0.1	0.1	34.4	32.3	0.0
Pulp, paper prods.	1.8	1.4	0.0	0.0	0.0
Textiles, apparel	3.8	3.2	0.0	0.0	0.0
Footwear, made-up articles	0.1	0.0	0.0	0.0	0.0
Stone, mineral prods.	1.4	1.2	0.0	0.0	0.0
Precious stones, jewellery	0.3	0.3	10.7	9.9	0.0
Base metals, metal prods.	18.5	15.0	0.0	0.0	0.0
Machinery	2.5	2.1	0.0	0.0	0.0
Transport equip.	0.4	0.4	0.0	0.0	0.0
Professional equip.	0.0	0.0	91.3	91.7	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.3	0.2	46.3	46.9	0.0
Works of art	2.3	1.6	148.7	148.7	0.0
All products	68.2	56.0	468.6	364.6	0.0

APPENDIX: Table 25 (Cont.). Oman: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	2.7	16.5	-102.2	9.2	9.0
Vegetable prods.	-5.3	2.4	-6.6	-0.4	-2.2
Fats, oils	-2.1	1.9	-2.5	-0.2	-0.6
Manufactured foodstuffs	100.1	78.7	60.7	34.1	95.8
Mineral prods.	3.8	4.9	0.4	0.3	-0.2
Chemicals	-23.3	-12.8	8.5	7.7	3.8
Rubber, plastics	-15.5	-9.3	2.3	1.4	-1.0
Hides, leather prods.	0.2	1.0	-7.9	0.7	0.6
Cork, wood articles	0.2	1.2	-34.2	-32.0	1.4
Pulp, paper prods.	-6.2	-3.2	-1.4	-1.3	-1.6
Textiles, apparel	-3.3	2.4	-3.1	-0.3	3.0
Footwear, made-up articles	2.1	3.8	1.2	2.4	3.0
Stone, mineral prods.	-1.9	0.9	3.4	3.6	2.1
Precious stones, jewellery	9.7	12.9	2.3	3.4	14.4
Base metals, metal prods.	-31.6	-13.6	6.8	6.8	0.2
Machinery	-3.7	43.5	75.6	76.3	54.3
Transport equip.	-36.7	6.0	32.8	33.6	11.8
Professional equip.	7.4	10.9	-83.9	-84.2	11.1
Arms, ammunition	0.1	0.1	0.1	0.1	0.1
Miscellaneous manufs.	4.1	6.1	-41.4	-42.0	6.6
Works of art	-1.1	2.4	-147.0	-147.0	4.2
All products	-0.4	156.8	-236.0	-127.9	215.9
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	0.3	0.7	0.0	0.2	0.2
Vegetable prods.	-0.1	0.1	-0.2	0.0	0.0
Fats, oils	0.0	0.0	-0.1	0.0	0.0
Manufactured foodstuffs	13.4	12.4	6.1	4.2	7.6
Mineral prods.	0.0	0.1	0.0	0.0	0.0
Chemicals	0.0	0.1	0.1	0.1	0.0
Rubber, plastics	0.0	0.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.0	0.0	0.0
Cork, wood articles	0.0	0.1	0.0	0.0	0.0
Pulp, paper prods.	-0.1	0.0	0.0	0.0	0.0
Textiles, apparel	0.0	0.2	-0.1	0.0	0.0
Footwear, made-up articles	0.1	0.2	0.1	0.1	0.1
Stone, mineral prods.	0.0	0.1	0.0	0.0	0.0
Precious stones, jewellery	0.8	1.0	0.5	0.5	0.6
Base metals, metal prods.	-0.2	0.0	0.0	0.0	0.0
Machinery	-0.1	2.1	1.0	1.0	0.5
Transport equip.	-1.4	0.2	0.2	0.2	0.0
Professional equip.	0.5	0.7	0.1	0.2	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.3	0.4	0.1	0.1	0.2
Works of art	0.0	0.1	0.0	0.0	0.1
All products	13.5	18.6	8.0	6.8	9.7
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	11.9	4.6	13.2	11.1	9.4
Vegetable prods.	4.5	1.8	5.3	5.3	3.6
Fats, oils	2.1	0.6	2.5	1.9	1.7
Manufactured foodstuffs	21.4	29.9	28.6	35.4	24.0
Mineral prods.	206.9	152.9	362.1	364.2	401.7
Chemicals	6.4	5.0	4.2	4.3	5.0
Rubber, plastics	4.5	3.5	2.9	3.1	3.6
Hides, leather prods.	0.1	0.0	0.1	0.0	0.0
Cork, wood articles	0.1	0.1	0.1	0.1	0.1
Pulp, paper prods.	0.7	0.5	0.5	0.5	0.5
Textiles, apparel	11.4	8.8	17.1	17.1	10.1
Footwear, made-up articles	0.2	0.1	0.3	0.3	0.2
Stone, mineral prods.	2.2	1.7	1.5	1.4	1.7
Precious stones, jewellery	0.7	0.5	0.5	0.5	0.5
Base metals, metal prods.	10.3	7.5	6.6	6.6	7.8
Machinery	17.9	13.9	11.6	11.5	13.2
Transport equip.	54.8	42.6	35.5	35.2	41.1
Professional equip.	1.7	1.3	1.7	1.7	1.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.1	2.4	2.9	2.9	2.3
Works of art	3.5	2.6	3.3	3.3	2.5
All products	364.3	280.5	500.3	506.3	530.4

APPENDIX: Table 25 (Cont.). Oman: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	1.3	0.2	12.8	0.0	0.0
Vegetable prods.	0.5	0.1	0.0	0.0	0.0
Fats, oils	0.3	0.0	0.0	0.0	0.0
Manufactured foodstuffs	1.4	2.5	19.3	52.4	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	11.3	8.9	0.0	0.0	0.0
Rubber, plastics	6.5	5.1	0.0	0.0	0.0
Hides, leather prods.	0.1	0.0	0.2	0.0	0.0
Cork, wood articles	0.0	0.0	1.8	1.7	0.0
Pulp, paper prods.	0.9	0.6	0.0	0.0	0.0
Textiles, apparel	1.9	1.5	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.7	0.5	0.0	0.0	0.0
Precious stones, jewellery	0.2	0.1	1.2	1.0	0.0
Base metals, metal prods.	9.0	6.4	0.0	0.0	0.0
Machinery	1.4	1.1	0.0	0.0	0.0
Transport equip.	0.2	0.2	0.0	0.0	0.0
Professional equip.	0.0	0.0	3.1	3.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.1	0.1	2.4	2.4	0.0
Works of art	2.1	1.5	4.5	4.5	0.0
All products	37.9	28.9	45.3	65.0	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	10.8	5.1	0.4	11.3	9.6
Vegetable prods.	3.9	1.7	5.1	5.3	3.6
Fats, oils	1.7	0.6	2.4	1.9	1.7
Manufactured foodstuffs	33.3	39.7	15.4	-12.8	31.7
Mineral prods.	207.0	153.0	362.1	364.2	401.7
Chemicals	-4.9	-3.8	4.3	4.4	5.0
Rubber, plastics	-1.9	-1.6	2.9	3.1	3.7
Hides, leather prods.	0.0	0.1	-0.1	0.1	0.1
Cork, wood articles	0.1	0.1	-1.7	-1.6	0.1
Pulp, paper prods.	-0.3	-0.2	0.5	0.5	0.5
Textiles, apparel	9.5	7.6	17.0	17.1	10.1
Footwear, made-up articles	0.3	0.4	0.3	0.4	0.3
Stone, mineral prods.	1.5	1.3	1.5	1.5	1.7
Precious stones, jewellery	1.3	1.4	-0.1	0.0	1.1
Base metals, metal prods.	1.2	1.2	6.6	6.6	7.8
Machinery	16.4	14.9	12.6	12.5	13.8
Transport equip.	53.1	42.6	35.7	35.5	41.1
Professional equip.	2.2	2.1	-1.2	-1.2	1.6
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.3	2.7	0.6	0.6	2.5
Works of art	1.5	1.2	-1.2	-1.2	2.6
All products	340.0	270.2	463.0	448.1	540.2
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-16.2	-26.6	-28.8	-26.4	-28.8
Vegetable prods.	-1.0	-10.2	-0.6	-10.1	-12.2
Fats, oils	-0.9	-3.6	-0.6	-3.6	-3.6
Manufactured foodstuffs	-118.0	-95.8	-149.1	-149.1	-149.1
Mineral prods.	-10.3	-10.3	-10.3	-10.3	-10.3
Chemicals	-18.1	-18.2	-20.7	-20.7	-20.7
Rubber, plastics	-8.8	-8.8	-10.2	-10.2	-10.2
Hides, leather prods.	-0.6	-1.0	-1.0	-1.0	-1.0
Cork, wood articles	-1.9	-2.4	-4.6	-4.6	-4.6
Pulp, paper prods.	-0.4	-1.4	-3.9	-3.9	-3.9
Textiles, apparel	-8.6	-10.0	-6.8	-8.6	-16.4
Footwear, made-up articles	-2.1	-2.8	-2.2	-2.8	-3.8
Stone, mineral prods.	-2.9	-3.4	-6.0	-6.0	-6.0
Precious stones, jewellery	-6.6	-7.3	-10.7	-10.7	-10.7
Base metals, metal prods.	-14.2	-15.7	-22.0	-22.0	-22.0
Machinery	-35.2	-43.6	-86.7	-86.7	-86.7
Transport equip.	-22.4	-30.2	-70.1	-70.1	-70.1
Professional equip.	-6.3	-7.1	-11.2	-11.2	-11.2
Arms, ammunition	-0.1	-0.2	-0.2	-0.2	-0.2
Miscellaneous manufs.	-5.9	-6.6	-9.9	-9.9	-9.9
Works of art	-9.1	-10.0	-13.2	-13.2	-13.2
All products	-289.9	-315.3	-468.5	-481.0	-494.4

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 26. Qatar: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-0.6	-0.2	-2.6	-2.6	-3.4
<u>Change in Real Exports</u>					
Live animals, animal prods.	0.2	0.0	0.2	0.2	0.1
Vegetable prods.	0.0	0.0	0.0	0.0	0.0
Fats, oils	0.0	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.0	0.0	0.0	0.0	0.0
Mineral prods.	15.9	-4.7	101.8	102.7	120.5
Chemicals	13.5	10.1	6.7	7.1	9.0
Rubber, plastics	12.5	9.3	6.1	6.8	8.6
Hides, leather prods.	0.1	0.0	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.0	0.0	0.0	0.0	0.0
Textiles, apparel	7.8	5.8	12.7	12.7	6.3
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.0	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.1	0.1	0.1	0.1	0.1
Base metals, metal prods.	10.8	7.3	5.1	5.1	6.6
Machinery	0.0	0.0	0.0	0.0	0.0
Transport equip.	0.0	0.0	0.0	0.0	0.0
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.0	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	61.0	28.0	133.0	134.9	151.4
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	-2.4	4.3	-3.3	0.3	0.3
Vegetable prods.	-1.4	2.5	-2.4	1.0	0.1
Fats, oils	-0.2	0.5	-0.4	0.1	0.0
Manufactured foodstuffs	7.0	2.6	3.8	0.8	6.0
Mineral prods.	2.5	2.8	1.2	1.2	1.0
Chemicals	-6.0	-0.8	4.5	3.9	1.0
Rubber, plastics	-2.4	-0.3	1.9	1.4	0.2
Hides, leather prods.	-0.2	0.4	-0.1	0.1	0.1
Cork, wood articles	-0.8	-0.1	-0.7	-0.6	0.2
Pulp, paper prods.	-1.0	0.3	0.7	0.8	0.7
Textiles, apparel	-4.2	-0.6	-6.8	-4.4	-1.5
Footwear, made-up articles	-0.6	0.3	-1.1	-0.4	0.0
Stone, mineral prods.	-2.2	-0.3	1.4	1.5	0.4
Precious stones, jewellery	-0.4	-0.1	0.0	0.0	0.2
Base metals, metal prods.	-12.4	2.8	12.9	13.0	5.9
Machinery	-52.1	-7.4	40.2	41.3	19.2
Transport equip.	-22.4	-3.0	17.1	17.6	7.1
Professional equip.	-4.8	-0.7	-4.4	-4.3	1.2
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-2.5	-0.4	-1.6	-1.6	0.8
Works of art	-0.1	0.0	-0.1	-0.1	0.1
All products	-106.5	2.9	62.8	71.7	42.9
<u>Trade Diversion</u>					
Live animals, animal prods.	1.5	0.8	58.0	0.0	0.0
Vegetable prods.	0.5	0.3	0.0	0.0	0.0
Fats, oils	0.1	0.1	0.0	0.0	0.0
Manufactured foodstuffs	0.7	1.0	4.7	6.9	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	16.6	13.9	0.0	0.0	0.0
Rubber, plastics	6.0	5.0	0.0	0.0	0.0
Hides, leather prods.	0.1	0.1	8.2	0.0	0.0
Cork, wood articles	0.0	0.0	24.9	23.4	0.0
Pulp, paper prods.	1.0	0.8	0.0	0.0	0.0
Textiles, apparel	3.3	2.7	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	1.3	1.1	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	1.2	1.1	0.0
Base metals, metal prods.	22.1	17.9	0.0	0.0	0.0
Machinery	4.3	3.5	0.0	0.0	0.0
Transport equip.	3.0	2.3	0.0	0.0	0.0
Professional equip.	0.2	0.1	130.2	130.8	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.5	0.4	59.0	59.8	0.0
Works of art	0.2	0.1	7.0	7.0	0.0
All products	61.6	50.1	293.1	228.9	0.0

APPENDIX: Table 26 (Cont.). Qatar: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	-3.9	3.5	-61.3	0.3	0.3
Vegetable prods.	-1.9	2.2	-2.4	1.0	0.1
Fats, oils	-0.3	0.4	-0.4	0.1	0.0
Manufactured foodstuffs	6.2	1.6	-0.9	-6.1	6.0
Mineral prods.	2.5	2.8	1.2	1.2	1.0
Chemicals	-22.5	-14.6	4.5	3.9	1.0
Rubber, plastics	-8.5	-5.3	1.9	1.4	0.2
Hides, leather prods.	-0.3	0.4	-8.3	0.1	0.1
Cork, wood articles	-0.8	-0.1	-25.6	-24.0	0.2
Pulp, paper prods.	-2.1	-0.5	0.7	0.8	0.7
Textiles, apparel	-7.4	-3.3	-6.8	-4.4	-1.5
Footwear, made-up articles	-0.7	0.2	-1.1	-0.4	0.0
Stone, mineral prods.	-3.5	-1.5	1.4	1.5	0.4
Precious stones, jewellery	-0.4	-0.1	-1.2	-1.1	0.2
Base metals, metal prods.	-34.4	-15.1	12.9	13.0	5.9
Machinery	-56.4	-10.8	40.2	41.3	19.2
Transport equip.	-25.4	-5.4	17.1	17.6	7.1
Professional equip.	-5.0	-0.8	-134.6	-135.1	1.2
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-3.0	-0.8	-60.6	-61.3	0.8
Works of art	-0.3	-0.1	-7.0	-7.0	0.1
All products	-168.0	-47.3	-230.3	-157.2	42.9
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	-0.1	0.1	0.0	0.0	0.0
Vegetable prods.	-0.1	0.1	-0.1	0.0	0.0
Fats, oils	0.0	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.5	0.2	0.1	0.0	0.1
Mineral prods.	0.0	0.1	0.0	0.0	0.0
Chemicals	0.0	0.0	0.0	0.0	0.0
Rubber, plastics	0.0	0.0	0.0	0.0	0.0
Hides, leather prods.	0.0	0.0	0.0	0.0	0.0
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.0	0.0	0.0	0.0	0.0
Textiles, apparel	-0.1	0.0	-0.2	-0.1	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	-0.1	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.0	0.0	0.0
Base metals, metal prods.	-0.2	0.1	0.1	0.1	0.0
Machinery	-2.1	-0.3	0.2	0.3	0.1
Transport equip.	-0.9	-0.1	0.1	0.1	0.0
Professional equip.	-0.2	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-0.1	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	-3.3	0.1	0.3	0.4	0.3
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	0.2	0.0	0.3	0.2	0.2
Vegetable prods.	0.0	0.0	0.0	0.0	0.0
Fats, oils	0.0	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.0	0.1	0.1	0.1	0.0
Mineral prods.	31.8	-9.4	205.7	207.5	244.0
Chemicals	13.9	10.3	6.8	7.2	9.1
Rubber, plastics	12.9	9.5	6.1	6.9	8.8
Hides, leather prods.	0.1	0.0	0.1	0.1	0.1
Cork, wood articles	0.0	0.0	0.0	0.0	0.0
Pulp, paper prods.	0.0	0.0	0.0	0.0	0.0
Textiles, apparel	8.0	5.9	13.3	13.3	6.4
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.0	0.0	0.0	0.0	0.0
Precious stones, jewellery	0.1	0.1	0.1	0.1	0.1
Base metals, metal prods.	11.1	7.5	5.2	5.2	6.8
Machinery	0.0	0.0	0.0	0.0	0.0
Transport equip.	0.0	0.0	0.0	0.0	0.0
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.0	0.0	0.0	0.0	0.0
Works of art	0.0	0.0	0.0	0.0	0.0
All products	78.2	24.0	237.8	240.6	275.5

APPENDIX: Table 26 (Cont.). Qatar: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	1.0	0.2	7.0	0.0	0.0
Vegetable prods.	0.3	0.1	0.0	0.0	0.0
Fats, oils	0.1	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.5	0.9	3.8	10.2	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	9.1	7.1	0.0	0.0	0.0
Rubber, plastics	3.5	2.7	0.0	0.0	0.0
Hides, leather prods.	0.1	0.0	0.2	0.0	0.0
Cork, wood articles	0.0	0.0	1.3	1.2	0.0
Pulp, paper prods.	0.5	0.3	0.0	0.0	0.0
Textiles, apparel	1.6	1.3	0.0	0.0	0.0
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	0.7	0.5	0.0	0.0	0.0
Precious stones, jewellery	0.0	0.0	0.1	0.1	0.0
Base metals, metal prods.	10.5	7.4	0.0	0.0	0.0
Machinery	2.6	2.0	0.0	0.0	0.0
Transport equip.	2.0	1.5	0.0	0.0	0.0
Professional equip.	0.1	0.1	4.3	4.3	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.3	0.2	3.1	3.0	0.0
Works of art	0.2	0.1	0.2	0.2	0.0
All products	33.0	24.5	20.1	19.1	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	-0.9	0.0	-6.7	0.2	0.2
Vegetable prods.	-0.4	0.0	-0.1	0.0	0.0
Fats, oils	-0.1	0.0	0.0	0.0	0.0
Manufactured foodstuffs	0.0	-0.6	-3.7	-10.1	0.2
Mineral prods.	31.8	-9.4	205.8	207.5	244.0
Chemicals	4.8	3.1	6.8	7.2	9.1
Rubber, plastics	9.4	6.8	6.2	6.9	8.8
Hides, leather prods.	0.0	0.0	-0.1	0.1	0.1
Cork, wood articles	-0.1	0.0	-1.3	-1.2	0.0
Pulp, paper prods.	-0.5	-0.3	0.0	0.0	0.0
Textiles, apparel	6.3	4.6	13.1	13.2	6.4
Footwear, made-up articles	0.0	0.0	0.0	0.0	0.0
Stone, mineral prods.	-0.7	-0.5	0.0	0.0	0.0
Precious stones, jewellery	0.1	0.1	0.0	0.0	0.1
Base metals, metal prods.	0.4	0.1	5.3	5.3	6.8
Machinery	-4.6	-2.3	0.2	0.3	0.1
Transport equip.	-2.8	-1.6	0.1	0.1	0.0
Professional equip.	-0.3	-0.1	-4.3	-4.3	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	-0.4	-0.2	-3.1	-3.0	0.0
Works of art	-0.1	-0.1	-0.2	-0.2	0.0
All products	42.0	-0.4	218.0	222.0	275.8
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	0.4	-5.3	-6.5	-5.2	-6.5
Vegetable prods.	0.9	-4.2	1.1	-4.1	-5.3
Fats, oils	0.0	-0.5	0.1	-0.5	-0.5
Manufactured foodstuffs	-8.0	-3.7	-14.1	-14.1	-14.1
Mineral prods.	-3.4	-3.4	-3.4	-3.4	-3.4
Chemicals	-7.5	-7.6	-9.7	-9.7	-9.7
Rubber, plastics	-3.1	-3.1	-3.9	-3.9	-3.9
Hides, leather prods.	0.0	-0.4	-0.4	-0.4	-0.4
Cork, wood articles	0.3	0.0	-1.6	-1.6	-1.6
Pulp, paper prods.	-0.1	-0.6	-2.0	-2.0	-2.0
Textiles, apparel	-0.3	-1.4	1.3	-0.2	-6.8
Footwear, made-up articles	0.2	-0.2	0.1	-0.2	-0.8
Stone, mineral prods.	-0.1	-0.5	-2.7	-2.7	-2.7
Precious stones, jewellery	0.1	0.0	-0.4	-0.4	-0.4
Base metals, metal prods.	-8.4	-10.2	-17.7	-17.7	-17.7
Machinery	7.6	-2.3	-50.9	-50.9	-50.9
Transport equip.	2.7	-1.7	-23.0	-23.0	-23.0
Professional equip.	1.1	-0.1	-5.8	-5.8	-5.8
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	0.7	-0.2	-4.4	-4.4	-4.4
Works of art	-0.1	-0.1	-0.3	-0.3	-0.3
All products	-17.1	-45.7	-144.0	-150.5	-160.1

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 27. Saudi Arabia: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-4.8	-4.3	-6.5	-6.6	-7.4
<u>Change in Real Exports</u>					
Live animals, animal prods.	14.5	7.7	15.2	13.3	11.7
Vegetable prods.	6.9	3.7	7.6	7.6	5.6
Fats, oils	1.6	0.7	1.7	1.4	1.3
Manufactured foodstuffs	11.3	15.0	13.9	16.6	12.1
Mineral prods.	1,380.5	1,226.6	1,863.0	1,883.5	2,013.8
Chemicals	316.3	267.0	219.8	226.8	253.9
Rubber, plastics	123.7	104.4	85.0	89.9	101.1
Hides, leather prods.	2.6	1.1	2.3	2.0	2.0
Cork, wood articles	0.6	0.5	0.6	0.6	0.5
Pulp, paper prods.	16.1	12.6	11.3	11.2	11.5
Textiles, apparel	13.9	11.7	18.7	18.8	12.3
Footwear, made-up articles	0.1	0.1	0.2	0.2	0.1
Stone, mineral prods.	14.1	12.0	10.0	9.9	11.2
Precious stones, jewellery	2.8	2.4	2.3	2.2	2.1
Base metals, metal prods.	56.5	45.6	38.6	38.8	43.8
Machinery	26.2	22.1	18.1	18.1	20.1
Transport equip.	1.9	1.6	1.3	1.3	1.5
Professional equip.	0.3	0.3	0.3	0.3	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	2.9	2.4	2.7	2.7	2.2
Works of art	0.0	0.0	0.0	0.0	0.0
All products	1,992.9	1,737.4	2,312.6	2,345.3	2,507.1
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	-9.8	51.0	-16.4	15.2	14.5
Vegetable prods.	11.8	73.2	-1.2	50.7	36.0
Fats, oils	4.0	17.3	1.3	9.4	7.9
Manufactured foodstuffs	3.3	-41.4	-28.2	-60.6	-6.0
Mineral prods.	19.3	20.7	14.3	14.1	13.4
Chemicals	44.4	105.1	165.6	156.5	121.7
Rubber, plastics	28.5	54.3	81.1	74.1	58.7
Hides, leather prods.	2.1	9.6	3.7	6.0	5.2
Cork, wood articles	7.7	14.3	8.7	9.4	17.4
Pulp, paper prods.	7.0	23.8	30.2	30.4	28.9
Textiles, apparel	52.7	94.0	28.4	53.0	83.2
Footwear, made-up articles	7.1	19.3	1.9	10.7	14.8
Stone, mineral prods.	17.5	32.4	46.5	47.2	37.6
Precious stones, jewellery	32.5	73.0	84.2	86.3	103.8
Base metals, metal prods.	102.7	200.4	117.9	115.7	216.5
Machinery	275.5	544.7	825.6	822.4	684.8
Transport equip.	-17.7	182.9	387.5	385.8	273.9
Professional equip.	19.7	47.0	24.5	24.4	57.5
Arms, ammunition	-6.1	5.4	0.5	-0.3	-1.0
Miscellaneous manufs.	24.1	36.5	30.2	30.0	42.5
Works of art	0.6	1.2	0.8	0.8	1.4
All products	626.7	1,564.9	1,807.1	1,881.3	1,812.6
<u>Trade Diversion</u>					
Live animals, animal prods.	7.8	3.9	513.8	0.0	0.0
Vegetable prods.	5.0	2.8	0.0	0.0	0.0
Fats, oils	2.0	1.0	0.0	0.0	0.0
Manufactured foodstuffs	5.5	7.1	49.3	71.7	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	27.6	21.9	0.0	0.0	0.0
Rubber, plastics	17.3	13.1	0.0	0.0	0.0
Hides, leather prods.	0.4	0.2	95.9	0.0	0.0
Cork, wood articles	0.2	0.1	236.1	221.9	0.0
Pulp, paper prods.	4.3	3.3	0.0	0.0	0.0
Textiles, apparel	33.4	27.8	0.0	0.0	0.0
Footwear, made-up articles	0.4	0.3	0.0	0.0	0.0
Stone, mineral prods.	4.8	4.0	0.0	0.0	0.0
Precious stones, jewellery	3.8	3.1	153.6	141.7	0.0
Base metals, metal prods.	112.4	90.7	0.0	0.0	0.0
Machinery	12.1	9.5	0.0	0.0	0.0
Transport equip.	27.9	21.8	0.0	0.0	0.0
Professional equip.	1.0	0.8	818.1	821.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.9	1.5	324.6	328.7	0.0
Works of art	1.0	0.7	36.1	36.0	0.0
All products	268.8	213.7	2,227.3	1,621.1	0.0

APPENDIX: Table 27 (Cont.). Saudi Arabia: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	-17.6	47.2	-530.2	15.2	14.5
Vegetable prods.	6.8	70.4	-1.2	50.7	36.0
Fats, oils	1.9	16.2	1.3	9.4	7.9
Manufactured foodstuffs	-2.3	-48.5	-77.4	-132.3	-6.0
Mineral prods.	19.3	20.7	14.3	14.1	13.4
Chemicals	16.8	83.2	165.6	156.5	121.7
Rubber, plastics	11.3	41.1	81.1	74.1	58.7
Hides, leather prods.	1.7	9.5	-92.2	6.0	5.2
Cork, wood articles	7.5	14.2	-227.4	-212.5	17.4
Pulp, paper prods.	2.7	20.5	30.2	30.4	28.9
Textiles, apparel	19.4	66.2	28.4	53.0	83.2
Footwear, made-up articles	6.7	19.0	1.9	10.7	14.8
Stone, mineral prods.	12.6	28.5	46.5	47.2	37.6
Precious stones, jewellery	28.7	69.9	-69.4	-55.4	103.8
Base metals, metal prods.	-9.7	109.7	117.9	115.7	216.5
Machinery	263.4	535.2	825.6	822.4	684.8
Transport equip.	-45.6	161.0	387.5	385.8	273.9
Professional equip.	18.6	46.2	-793.5	-796.6	57.5
Arms, ammunition	-6.1	5.4	0.5	-0.3	-1.0
Miscellaneous manufs.	22.2	35.0	-294.4	-298.6	42.5
Works of art	-0.4	0.5	-35.2	-35.2	1.4
All products	358.0	1,351.2	-420.2	260.2	1,812.6
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	-0.4	1.4	0.1	0.2	0.1
Vegetable prods.	0.6	2.7	-0.1	1.5	0.5
Fats, oils	0.2	0.6	0.1	0.2	0.1
Manufactured foodstuffs	0.2	-2.7	0.3	1.4	0.0
Mineral prods.	0.7	0.8	0.4	0.4	0.3
Chemicals	0.7	2.4	3.5	3.2	1.9
Rubber, plastics	0.5	1.4	2.0	1.7	1.1
Hides, leather prods.	0.1	0.4	0.1	0.1	0.1
Cork, wood articles	0.5	0.8	0.1	0.1	0.4
Pulp, paper prods.	0.3	1.0	0.6	0.6	0.6
Textiles, apparel	2.6	4.7	1.6	2.7	1.4
Footwear, made-up articles	0.4	1.0	0.1	0.4	0.2
Stone, mineral prods.	0.9	1.6	1.1	1.2	0.7
Precious stones, jewellery	1.8	3.9	1.4	1.5	2.1
Base metals, metal prods.	3.4	7.6	1.5	1.4	4.8
Machinery	15.6	29.8	19.7	19.6	13.8
Transport equip.	-0.8	8.2	5.7	5.7	2.9
Professional equip.	1.1	2.5	0.2	0.2	1.0
Arms, ammunition	-0.2	0.1	0.0	0.0	0.0
Miscellaneous manufs.	1.5	2.3	0.6	0.6	1.2
Works of art	0.0	0.0	0.0	0.0	0.0
All products	29.7	70.4	39.1	42.6	33.3
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	20.3	10.5	21.4	18.5	16.2
Vegetable prods.	9.6	5.1	10.7	10.6	7.8
Fats, oils	2.2	1.0	2.5	1.9	1.8
Manufactured foodstuffs	15.9	21.3	19.7	23.8	17.0
Mineral prods.	2,825.4	2,503.9	3,843.4	3,887.1	4,164.9
Chemicals	332.5	278.6	227.6	235.1	264.4
Rubber, plastics	130.1	108.9	88.0	93.3	105.4
Hides, leather prods.	2.8	1.2	2.4	2.1	2.1
Cork, wood articles	0.7	0.6	0.6	0.6	0.5
Pulp, paper prods.	16.9	13.1	11.7	11.6	12.0
Textiles, apparel	14.6	12.2	20.0	20.2	12.8
Footwear, made-up articles	0.2	0.1	0.2	0.2	0.1
Stone, mineral prods.	14.9	12.5	10.4	10.3	11.7
Precious stones, jewellery	3.0	2.5	2.4	2.3	2.1
Base metals, metal prods.	59.4	47.5	39.9	40.2	45.6
Machinery	27.5	23.1	18.7	18.7	20.8
Transport equip.	2.0	1.7	1.4	1.4	1.5
Professional equip.	0.3	0.3	0.3	0.3	0.3
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.0	2.5	2.8	2.8	2.3
Works of art	0.0	0.0	0.0	0.0	0.0
All products	3,481.2	3,046.4	4,324.1	4,381.2	4,689.3

APPENDIX: Table 27 (Cont.). Saudi Arabia: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	5.4	0.8	63.0	0.0	0.0
Vegetable prods.	3.1	0.5	0.0	0.0	0.0
Fats, oils	1.2	0.0	0.0	0.0	0.0
Manufactured foodstuffs	3.9	7.1	39.5	106.8	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	19.3	15.1	0.0	0.0	0.0
Rubber, plastics	14.0	11.0	0.0	0.0	0.0
Hides, leather prods.	0.2	0.0	2.4	0.0	0.0
Cork, wood articles	0.1	0.1	12.6	11.6	0.0
Pulp, paper prods.	2.0	1.3	0.0	0.0	0.0
Textiles, apparel	17.3	13.5	0.0	0.0	0.0
Footwear, made-up articles	0.2	0.1	0.0	0.0	0.0
Stone, mineral prods.	2.1	1.7	0.0	0.0	0.0
Precious stones, jewellery	1.8	1.4	16.7	14.9	0.0
Base metals, metal prods.	54.0	38.3	0.0	0.0	0.0
Machinery	8.0	6.2	0.0	0.0	0.0
Transport equip.	18.5	14.5	0.0	0.0	0.0
Professional equip.	0.8	0.6	27.3	27.1	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.1	0.8	17.1	16.7	0.0
Works of art	0.8	0.6	1.1	1.1	0.0
All products	153.6	113.6	179.8	178.2	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	14.5	11.0	-41.5	18.7	16.3
Vegetable prods.	7.2	7.2	10.7	12.1	8.3
Fats, oils	1.2	1.6	2.5	2.1	1.9
Manufactured foodstuffs	12.1	11.5	-19.5	-81.5	17.0
Mineral prods.	2,826.1	2,504.7	3,843.8	3,887.5	4,165.3
Chemicals	313.9	265.8	231.1	238.2	266.3
Rubber, plastics	116.6	99.3	90.0	95.0	106.4
Hides, leather prods.	2.7	1.5	0.0	2.2	2.2
Cork, wood articles	1.0	1.3	-11.8	-10.9	0.9
Pulp, paper prods.	15.2	12.8	12.3	12.2	12.5
Textiles, apparel	0.0	3.4	21.6	22.8	14.2
Footwear, made-up articles	0.4	1.0	0.3	0.6	0.4
Stone, mineral prods.	13.6	12.4	11.5	11.4	12.4
Precious stones, jewellery	3.0	5.0	-13.0	-11.1	4.2
Base metals, metal prods.	8.9	16.8	41.4	41.6	50.4
Machinery	35.1	46.6	38.4	38.3	34.7
Transport equip.	-17.3	-4.6	7.1	7.1	4.5
Professional equip.	0.7	2.2	-26.8	-26.6	1.2
Arms, ammunition	-0.2	0.1	0.0	0.0	0.0
Miscellaneous manufs.	3.5	4.0	-13.7	-13.3	3.5
Works of art	-0.8	-0.5	-1.0	-1.0	0.1
All products	3,357.2	3,003.1	4,183.4	4,245.6	4,722.6
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-73.9	-125.3	-135.8	-124.1	-135.8
Vegetable prods.	-129.1	-207.1	-125.5	-206.6	-224.5
Fats, oils	-16.7	-26.7	-15.6	-26.7	-26.7
Manufactured foodstuffs	-83.0	-38.1	-146.3	-146.3	-146.3
Mineral prods.	-41.2	-41.2	-41.2	-41.2	-41.2
Chemicals	-267.6	-268.5	-291.5	-291.5	-291.5
Rubber, plastics	-118.6	-118.8	-127.9	-127.9	-127.9
Hides, leather prods.	-7.7	-12.0	-12.0	-12.0	-12.0
Cork, wood articles	-26.3	-29.7	-44.6	-44.6	-44.6
Pulp, paper prods.	-42.8	-49.8	-66.4	-66.4	-66.4
Textiles, apparel	-147.7	-159.9	-130.1	-146.7	-218.4
Footwear, made-up articles	-17.3	-22.0	-17.4	-22.2	-29.9
Stone, mineral prods.	-39.2	-42.5	-59.3	-59.3	-59.3
Precious stones, jewellery	-79.1	-89.1	-137.3	-137.3	-137.3
Base metals, metal prods.	-244.8	-255.7	-301.8	-301.8	-301.8
Machinery	-462.5	-517.4	-792.2	-792.2	-792.2
Transport equip.	-295.3	-336.9	-544.9	-544.9	-544.9
Professional equip.	-55.3	-62.8	-98.3	-98.3	-98.3
Arms, ammunition	-6.2	-19.5	-19.5	-19.5	-19.5
Miscellaneous manufs.	-49.5	-54.5	-77.2	-77.2	-77.2
Works of art	-3.3	-3.5	-4.3	-4.3	-4.3
All products	-2,207.2	-2,481.0	-3,189.1	-3,291.0	-3,400.0

Source: MENA trade simulation model, November 6, 2003.

APPENDIX: Table 28. United Arab Emirates: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Percent Change in Real Exchange Rate (US\$/LC)</u>					
All products	-8.7	-7.5	-9.7	-9.9	-10.7
<u>Change in Real Exports</u>					
Live animals, animal prods.	9.6	5.9	9.4	8.7	7.9
Vegetable prods.	8.3	5.1	8.5	8.6	6.9
Fats, oils	9.0	5.0	9.3	7.9	7.6
Manufactured foodstuffs	11.0	12.9	12.2	14.2	11.1
Mineral prods.	645.8	549.1	707.1	726.9	760.4
Chemicals	9.4	7.8	6.8	7.1	7.7
Rubber, plastics	3.6	3.0	2.6	2.8	3.0
Hides, leather prods.	0.6	0.3	0.5	0.5	0.5
Cork, wood articles	0.2	0.2	0.2	0.2	0.1
Pulp, paper prods.	4.3	3.4	3.2	3.2	3.3
Textiles, apparel	40.1	33.2	47.7	48.5	35.1
Footwear, made-up articles	0.5	0.4	0.5	0.5	0.4
Stone, mineral prods.	10.0	8.3	7.4	7.4	8.1
Precious stones, jewellery	6.0	4.9	4.8	4.8	4.6
Base metals, metal prods.	112.7	90.5	80.7	82.6	89.9
Machinery	2.4	2.0	1.8	1.8	1.9
Transport equip.	0.8	0.7	0.6	0.6	0.7
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.4	1.2	1.3	1.3	1.1
Works of art	0.0	0.0	0.0	0.0	0.0
All products	875.8	733.9	904.4	927.6	950.3
<u>Trade Creation = Change in Real Imports</u>					
Live animals, animal prods.	49.5	119.9	52.9	81.6	80.7
Vegetable prods.	15.7	89.9	13.0	63.7	48.3
Fats, oils	-9.3	51.3	-12.4	17.7	11.7
Manufactured foodstuffs	367.8	262.7	303.9	192.3	364.2
Mineral prods.	-2.0	1.6	-4.7	-5.5	-6.2
Chemicals	-66.9	-20.9	8.7	0.0	-17.6
Rubber, plastics	-15.1	12.2	30.7	23.4	12.5
Hides, leather prods.	-2.2	7.9	0.9	3.3	2.4
Cork, wood articles	-3.8	1.8	-1.3	-1.4	3.0
Pulp, paper prods.	-13.5	-2.8	0.0	-0.6	-1.4
Textiles, apparel	25.9	119.1	21.0	49.5	93.5
Footwear, made-up articles	10.8	25.7	9.3	16.6	20.5
Stone, mineral prods.	14.8	35.0	47.3	46.1	37.4
Precious stones, jewellery	12.1	77.4	88.8	85.2	103.0
Base metals, metal prods.	-93.9	-23.1	-65.7	-72.1	-21.4
Machinery	-393.0	-138.1	35.1	9.5	-78.1
Transport equip.	-254.0	-108.4	-11.6	-25.9	-80.3
Professional equip.	-19.1	7.6	-7.0	-9.4	11.6
Arms, ammunition	-0.1	0.2	0.1	0.0	0.0
Miscellaneous manufs.	29.6	54.3	45.8	43.4	59.7
Works of art	0.0	0.0	0.0	0.0	0.0
All products	-346.9	573.5	554.4	517.4	643.5
<u>Trade Diversion</u>					
Live animals, animal prods.	9.5	4.5	511.1	0.0	0.0
Vegetable prods.	4.5	2.2	0.0	0.0	0.0
Fats, oils	2.6	1.0	0.0	0.0	0.0
Manufactured foodstuffs	17.6	23.9	156.4	227.4	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	89.8	75.9	0.0	0.0	0.0
Rubber, plastics	50.5	42.0	0.0	0.0	0.0
Hides, leather prods.	1.4	0.6	113.3	0.0	0.0
Cork, wood articles	0.2	0.2	132.9	124.6	0.0
Pulp, paper prods.	4.7	3.7	0.0	0.0	0.0
Textiles, apparel	36.2	30.7	0.0	0.0	0.0
Footwear, made-up articles	0.3	0.2	0.0	0.0	0.0
Stone, mineral prods.	5.6	4.8	0.0	0.0	0.0
Precious stones, jewellery	2.4	2.0	161.6	148.3	0.0
Base metals, metal prods.	42.3	34.9	0.0	0.0	0.0
Machinery	14.0	11.6	0.0	0.0	0.0
Transport equip.	13.3	10.7	0.0	0.0	0.0
Professional equip.	0.8	0.6	526.1	525.9	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	3.1	2.6	430.1	434.3	0.0
Works of art	0.1	0.0	2.2	2.2	0.0
All products	298.8	252.0	2,033.6	1,462.6	0.0

APPENDIX: Table 28 (Cont.). United Arab Emirates: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Net Trade Creation</u>					
Live animals, animal prods.	40.0	115.4	-458.2	81.6	80.7
Vegetable prods.	11.2	87.6	13.0	63.7	48.3
Fats, oils	-12.0	50.3	-12.4	17.7	11.7
Manufactured foodstuffs	350.2	238.9	147.5	-35.1	364.2
Mineral prods.	-2.0	1.6	-4.7	-5.5	-6.2
Chemicals	-156.6	-96.9	8.7	0.0	-17.6
Rubber, plastics	-65.6	-29.8	30.7	23.4	12.5
Hides, leather prods.	-3.5	7.3	-112.4	3.3	2.4
Cork, wood articles	-4.0	1.7	-134.2	-126.0	3.0
Pulp, paper prods.	-18.1	-6.5	0.0	-0.6	-1.4
Textiles, apparel	-10.3	88.4	21.0	49.5	93.5
Footwear, made-up articles	10.5	25.6	9.3	16.6	20.5
Stone, mineral prods.	9.1	30.3	47.3	46.1	37.4
Precious stones, jewellery	9.7	75.4	-72.8	-63.2	103.0
Base metals, metal prods.	-136.3	-58.0	-65.7	-72.1	-21.4
Machinery	-407.0	-149.7	35.1	9.5	-78.1
Transport equip.	-267.3	-119.0	-11.6	-25.9	-80.3
Professional equip.	-19.9	7.0	-533.2	-535.3	11.6
Arms, ammunition	-0.1	0.2	0.1	0.0	0.0
Miscellaneous manufs.	26.5	51.8	-384.3	-390.8	59.7
Works of art	-0.1	0.0	-2.2	-2.2	0.0
All products	-645.8	321.5	-1,479.2	-945.3	643.5
<u>Change in Consumer Surplus</u>					
Live animals, animal prods.	3.2	6.9	1.3	3.6	2.9
Vegetable prods.	0.8	3.9	0.7	2.2	0.9
Fats, oils	-0.4	1.4	-0.5	0.2	0.1
Manufactured foodstuffs	34.6	30.7	12.3	5.1	17.3
Mineral prods.	0.0	0.0	0.0	0.1	0.1
Chemicals	0.6	-0.1	0.0	0.0	0.1
Rubber, plastics	0.0	0.2	0.4	0.2	0.1
Hides, leather prods.	-0.1	0.2	0.0	0.0	0.0
Cork, wood articles	-0.2	0.1	0.0	0.0	0.0
Pulp, paper prods.	-0.3	-0.1	0.0	0.0	0.0
Textiles, apparel	1.1	5.7	1.1	2.3	1.2
Footwear, made-up articles	0.7	1.6	0.6	0.9	0.5
Stone, mineral prods.	0.7	1.9	1.4	1.3	0.9
Precious stones, jewellery	0.6	4.1	1.5	1.4	2.0
Base metals, metal prods.	-0.3	-0.3	0.9	1.1	0.1
Machinery	-11.1	-4.4	0.1	0.0	0.3
Transport equip.	-6.2	-3.1	0.0	0.1	0.5
Professional equip.	-0.8	0.3	0.0	0.0	0.1
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.9	3.6	1.1	1.0	1.9
Works of art	0.0	0.0	0.0	0.0	0.0
All products	25.1	52.8	20.9	19.4	29.0
<u>Change in Producer Surplus</u>					
Live animals, animal prods.	13.8	8.2	13.5	12.3	11.2
Vegetable prods.	11.9	7.1	12.2	12.3	9.7
Fats, oils	12.9	7.0	13.3	11.3	10.8
Manufactured foodstuffs	15.8	18.8	17.6	20.8	15.9
Mineral prods.	1,350.1	1,140.4	1,484.5	1,528.2	1,602.2
Chemicals	10.1	8.2	7.2	7.5	8.1
Rubber, plastics	3.9	3.2	2.8	2.9	3.2
Hides, leather prods.	0.7	0.3	0.6	0.5	0.5
Cork, wood articles	0.2	0.2	0.2	0.2	0.2
Pulp, paper prods.	4.6	3.6	3.3	3.4	3.5
Textiles, apparel	43.1	35.3	51.9	52.9	37.3
Footwear, made-up articles	0.5	0.4	0.5	0.6	0.4
Stone, mineral prods.	10.8	8.8	7.8	7.9	8.6
Precious stones, jewellery	6.4	5.3	5.1	5.1	4.8
Base metals, metal prods.	121.1	95.9	85.0	87.2	95.3
Machinery	2.6	2.2	1.9	1.9	2.0
Transport equip.	0.9	0.7	0.6	0.7	0.7
Professional equip.	0.0	0.0	0.0	0.0	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.5	1.2	1.3	1.4	1.2
Works of art	0.0	0.0	0.0	0.0	0.0
All products	1,610.9	1,346.8	1,709.2	1,756.9	1,815.7

APPENDIX: Table 28 (Cont.). United Arab Emirates: Impacts of EU-GCC Trade Arrangements by HS Section
(Millions of US Dollars per Annum, at 2000 Prices)

	Scenario				
	CU (5% CET)	CU (Min CET)	FTA (5% CET)	FTA (Min CET)	MFN
<u>Forgone Tariff Revenue</u>					
Live animals, animal prods.	7.4	1.1	62.4	0.0	0.0
Vegetable prods.	3.4	0.6	0.0	0.0	0.0
Fats, oils	2.1	0.0	0.0	0.0	0.0
Manufactured foodstuffs	13.9	25.3	125.4	338.3	0.0
Mineral prods.	0.0	0.0	0.0	0.0	0.0
Chemicals	50.9	40.5	0.0	0.0	0.0
Rubber, plastics	30.6	24.3	0.0	0.0	0.0
Hides, leather prods.	0.8	0.0	2.9	0.0	0.0
Cork, wood articles	0.1	0.1	7.1	6.5	0.0
Pulp, paper prods.	2.5	1.7	0.0	0.0	0.0
Textiles, apparel	21.5	17.1	0.0	0.0	0.0
Footwear, made-up articles	0.2	0.1	0.0	0.0	0.0
Stone, mineral prods.	3.1	2.5	0.0	0.0	0.0
Precious stones, jewellery	1.5	1.2	17.7	15.7	0.0
Base metals, metal prods.	23.9	17.3	0.0	0.0	0.0
Machinery	8.5	6.8	0.0	0.0	0.0
Transport equip.	8.8	7.1	0.0	0.0	0.0
Professional equip.	0.5	0.4	17.6	17.4	0.0
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.8	1.5	22.7	22.0	0.0
Works of art	0.0	0.0	0.1	0.1	0.0
All products	181.6	147.5	255.8	400.0	0.0
<u>Change in Economic Welfare</u>					
Live animals, animal prods.	9.7	13.9	-47.6	15.9	14.1
Vegetable prods.	9.3	10.4	12.9	14.5	10.7
Fats, oils	10.5	8.4	12.8	11.4	10.8
Manufactured foodstuffs	36.5	24.2	-95.6	-312.4	33.2
Mineral prods.	1,350.1	1,140.4	1,484.5	1,528.2	1,602.2
Chemicals	-40.2	-32.3	7.2	7.5	8.2
Rubber, plastics	-26.7	-20.9	3.2	3.2	3.3
Hides, leather prods.	-0.2	0.6	-2.3	0.6	0.5
Cork, wood articles	-0.1	0.2	-6.9	-6.3	0.2
Pulp, paper prods.	1.9	1.8	3.3	3.4	3.5
Textiles, apparel	22.7	23.9	53.0	55.2	38.6
Footwear, made-up articles	1.1	1.9	1.1	1.4	1.0
Stone, mineral prods.	8.4	8.2	9.1	9.2	9.5
Precious stones, jewellery	5.6	8.2	-11.1	-9.2	6.8
Base metals, metal prods.	96.9	78.3	85.9	88.2	95.4
Machinery	-17.0	-9.1	1.9	1.9	2.3
Transport equip.	-14.1	-9.4	0.6	0.7	1.2
Professional equip.	-1.3	-0.1	-17.5	-17.3	0.1
Arms, ammunition	0.0	0.0	0.0	0.0	0.0
Miscellaneous manufs.	1.6	3.4	-20.2	-19.6	3.1
Works of art	0.0	0.0	-0.1	-0.1	0.0
All products	1,454.5	1,252.1	1,474.3	1,376.3	1,844.7
<u>Change in Tariff Revenue</u>					
Live animals, animal prods.	-203.1	-253.6	-263.9	-252.4	-263.9
Vegetable prods.	-234.9	-314.7	-230.7	-314.2	-332.6
Fats, oils	-85.5	-124.8	-80.7	-124.8	-124.8
Manufactured foodstuffs	-789.2	-645.0	-988.3	-988.3	-988.3
Mineral prods.	-29.0	-29.0	-29.0	-29.0	-29.0
Chemicals	-138.9	-139.2	-150.6	-150.6	-150.6
Rubber, plastics	-96.7	-96.8	-103.1	-103.1	-103.1
Hides, leather prods.	-11.1	-16.1	-16.1	-16.1	-16.1
Cork, wood articles	-17.7	-19.5	-27.9	-27.9	-27.9
Pulp, paper prods.	-20.5	-23.6	-31.2	-31.2	-31.2
Textiles, apparel	-309.7	-326.5	-282.2	-307.3	-413.5
Footwear, made-up articles	-29.0	-33.2	-29.0	-33.4	-40.7
Stone, mineral prods.	-54.3	-56.9	-71.8	-71.8	-71.8
Precious stones, jewellery	-133.1	-142.6	-193.7	-193.7	-193.7
Base metals, metal prods.	-122.5	-127.6	-151.2	-151.2	-151.2
Machinery	-309.5	-339.6	-511.0	-511.0	-511.0
Transport equip.	-177.6	-195.2	-294.7	-294.7	-294.7
Professional equip.	-48.1	-52.5	-75.4	-75.4	-75.4
Arms, ammunition	-0.4	-0.8	-0.8	-0.8	-0.8
Miscellaneous manufs.	-99.1	-105.4	-135.4	-135.4	-135.4
Works of art	-0.2	-0.3	-0.3	-0.3	-0.3
All products	-2,910.2	-3,042.8	-3,667.1	-3,812.8	-3,956.2

Source: MENA trade simulation model, November 6, 2003.