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European Union–Developing Country FTAs: Overview and Analysis

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Summary. — This paper explores the complex structures of recent free-trade agreements (FTAs) between the European Union and developing countries, surveys the main factors determining their economic effects, and presents quantitative simulations of the effects of these agreements. Limitations of product coverage substantially reduce the potential benefits of the agreements compared to full bilateral free trade, while only the Mexico, Chile, and Turkey agreements have trade related commitments which are wider and deeper than the preferential reduction in tariffs. In the case of Egypt, existing levels of protection mean that it is moving toward regional free trade with many domestic distortions still in place, producing a significant loss for the Egyptian economy.

Key words — free-trade agreements, CGE modeling, European Union, developing countries

1. INTRODUCTION

The Uruguay Round Agreements and the creation of the WTO have strengthened the multilateral trading system. At the same time, however, there has also been a proliferation of free-trade agreements (FTAs) in the world economy. The European Union has been the major driving force behind the spread of FTAs in the developing world in recent years. A combination of economic and political factors (including greater peace and stability in the EU hinterland, support for democratic reforms and the furthering of trade and investment liberalization in developing countries, and accessing new markets for EU exports), have motivated the European Union to conclude such agreements. For developing countries, the attraction has been preferential access to the large EU market and the prospect of increased EU aid.

Against this background, this paper undertakes an analysis of the complex structure of these agreements and surveys the main factors determining their economic effects. It then presents a simulation of the quantitative effects of five European Union–developing partner FTAs (South Africa, Mexico, Chile, MERCOSUR, [1] and Egypt) and the customs union agreement in industrial products with Turkey. Five of these agreements have been concluded (South Africa, Mexico, Chile, Turkey, and Egypt)

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while the one with MERCOSUR is, at the time of writing, still being negotiated. It stresses the likely economic effects on the trade, welfare, and economic structure of both parties of these preferential trading agreements, as well as the impact on third countries. The quantitative analysis is built around the Global Trade Analysis Project (GTAP) computable general equilibrium model and database (version 5.0) with an aggregation of 29 regions and 24 sectors. [2] Previous studies on the effects of EU-FTAs using GTAP 5 or CGE models, such as those on South Africa (Lewis, Robinson, & Thierfelder, 1999; McDonald & Walmsley, 2003), Turkey (Alessandri, 2000; Harrison, Rutherford, & Tarr, 1996), and Egypt (Dessus & Suwa-Eisenmann, 1998) have assumed full liberalization between the partner countries. This paper goes beyond the literature and simulates two alternative policy scenarios within the model: (a) the actual European Union–developing country FTA and (b) a full European Union–developing country FTA (expanded to include the products currently excluded in the actual FTA) [3] and examines (a) in relation to (b).

Section 2 discusses some key characteristics of the EU's trade agreement partners. Sections 3 and 4 chart the spread of European Union–developing country FTAs since the mid-1990s and analyzes key aspects of the agreements. Sections 5 and 6 present the modeling results on the overall effects of the trade agreements, and compare them with full free trade.

2. CHARACTERISTICS OF THE EU'S TRADE AGREEMENT PARTNERS

The discussion starts with a brief examination, using the GTAP 5 data (based on 1997), of the key characteristics of the EU's trading agreement partners. As shown in Table 1, collectively the MERCOSUR economies (dominated by Brazil) are the largest economy among the six agreement partners. Mexico follows this some way behind. Chile and Egypt are the smallest, whereas Turkey and South Africa fall in between these extremes. It is noteworthy that the total GDP of the six economies combined amounts to about a quarter of the GDP of the European Union.

At the same time, there is a significant variation in the production structures of the six agreement partners. MERCOSUR and Mexico are the most industrialized whereas Chile is by far the least. All the agreement partners have significant service economies (making up around half of the GDP). Chile and Turkey have the largest agriculture and food processing sectors while the others have significant shares of agriculture and food processing sectors. By comparison, the EU's economy is dominated by services and, to a lesser extent, manufacturing while its agricultural and food processing sectors have declined and account for a negligible share of the economic activity.

The individual developing countries are relatively small trading partners for the European Union and even when combined only account for 3.7% of total EU exports and 2.9% of total EU imports (*IMF Direction of Trade Statistics, 2001*). In contrast, the European Union is a major export market for most of the agreement partners. Hence, the European Union accounts for 54.6% of exports in Turkey, 43.6% in Egypt, 28.6% in South Africa, 25.2% in Chile, and 23.8% in MERCOSUR (Table 2). Mexico, with a particularly high reliance on the US market (accounting for 90.7% of Mexico's exports), is an exception with only 3.4%. On the import side, Turkey, South Africa, and Egypt have particularly strong ties with the European Union (with between 37% and 50% of their imports from the European Union) while the

Table 1. *GDP shares*

Country/region	GDP ($bn)	Agriculture (%)	Processed food (%)	Mining (% shares)	Manufacture (%)	Services (%)
South Africa	139.1	4.2	7.0	5.0	28.8	55.1
Mexico	388.8	7.3	9.5	3.8	34.2	45.2
Chile	76.1	8.7	12.0	3.9	23.5	52.0
MERCOSUR	1,134.7	7.9	10.1	1.3	34.3	46.2
Turkey	192.4	11.4	8.3	0.8	26.6	52.8
Egypt	70.2	13.2	4.6	3.8	27.5	50.8
European Union	7,958.0	2.8	5.5	0.4	29.1	62.3

Source: GTAP 5.

Table 2. *Composition of developing country exports to the European Union (% share)*

Sector	South Africa	Mexico	Chile	MERCOSUR	Turkey	Egypt
Agriculture	11	7	12	24	9	12
Processed food	9	4	15	26	2	1
Mining	24	2	10	10	3	45
Manufactures	56	87	63	39	86	42
Total[a]	100	100	100	99	100	100

Source: GTAP 5; Egypt: Francois and Spinanger (2002b).
[a] Total may not add up to 100 because of rounding.

three Latin American economies have somewhat weaker ties (with between 9% and 20% of imports from the European Union).

The commodity composition of EU exports to the developing country partners and the make-up of their exports to the European Union reflect endowments, historical ties, and trade policies among other factors. The EU's exports to the developing country partners are dominated by manufactures (in excess of 95% of total export value), and the pattern has shown little change since the mid-1960s (Maxwell Stamp PLC, 2003). Processed food products (2–4%) and agricultural items (around 1%) make-up a tiny share of the EU's exports to the six developing countries. There are also small shares of EU mining exports to Turkey.

In contrast, there has been a marked structural transformation in the export patterns of the EU's partner countries over the same period (see Table 2 for data on selected partners). This is associated with the rapid rise of manufacturers and a decline in the share of agriculture and processed food products. The share of manufactures in total exports increased from 30% to 87% in Mexico, 8% to 86% in Turkey, 11% to 56% in South Africa, and 2% to 39% in MERCOSUR. Although Chile's exports are also dominated by manufacturers (63%), there has been a notable decline in this category from 1965 levels and a rise in processed food, agricultural products, and mining.

Data on bilateral trade weighted average tariff rates [4] levied by the European Union against five developing country partners and similar ones levied by all six developing country partners against the European Union are shown in Tables 3 and 4. There is a distinct pattern

Table 3. *EU trade weighted bilateral import tariffs against FTA developing country partners*[a]

Sector	South Africa	Mexico	Chile	MERCOSUR	Turkey	Egypt
Agriculture	12	15	14	5	12	n/a
Processed food	41	29	23	30	27	n/a
Mining	0	0	0	0	0	n/a
Manufactures	2	4	1	4	9	n/a
Services	0	0	0	0	0	n/a

Source: GTAP 5.
[a] *Ad valorem* rate.

Table 4. *Developing country trade weighted bilateral import tariffs against the European Union*[a]

Sector	South Africa	Mexico	Chile	MERCOSUR	Turkey	Egypt
Agriculture	21	6	11	10	11	8
Processed food	72	30	11	18	43	12
Mining	0	6	12	2	1	5
Manufactures	8	10	11	15	7	22
Services	0	0	0	0	0	0

Source: GTAP 5; Egypt: Francois and Spinanger (2002b).
[a] *Ad valorem* rate.

of import protection in the European Union against developing country products. The European Union seems to be providing a relatively high import protection for declining sectors such as processed food and agriculture and a relatively low protection for manufacturing, one of its leading sectors. There is also some variation by country within this general pattern. For instance, South Africa seems to face the highest import duties against food processing exports and Chile, the lowest. Furthermore, Mexico and Chile confront relatively high protection against agricultural items. There is relatively little variation in low protection rates against manufacturers, and duties on EU imports of manufactures from Turkey have now been phased out under the customs union agreement.

More variation is visible in protection levied by developing countries against the European Union. Interestingly, Chile has remarkably low uniform rates of import protection of around 11% (12% for mining) for most categories of EU imports. However, the other developing countries have much higher rates against EU imports. South Africa seems to have relatively high rates particularly for processed food (72%) and agricultural products (21%) while MERCOSUR and Egypt have quite high rates for manufacturers. Mexico levies relatively high rates for processed food, but not for agricultural goods or manufacturers. Turkey has relatively low rates for most products (notable only 7% for manufactures) except processed food.

3. THE SPREAD OF EU TRADE AGREEMENTS

The European Union has, since 1995, been central to the proliferation of trade agreements in the world economy. Details of the agreement, which have been concluded, or are currently, being negotiated (with the exception of the long-standing negotiations with the GCC States) are given in Table 5. They show that the European Union has agreements, or is in the process of negotiating agreements, with the Middle East and North African (MENA) countries, a substantial proportion of Latin America, the African, Caribbean and Pacific countries, and South Africa. A common feature of the agreements is the replacement of unilateral preferences with reciprocal preferences.

The reasons for this change of trade policy toward the developing countries have been derived from political, economic, and legal considerations; the precise mix of these three components varying according to the primary objectives of the agreement.

Legal considerations principally derived from the Uruguay Round Agreements of 1994, which strengthened the ''rules based'' system of international trade and focused attention on the incompatibility of the EU's unilateral preferences for the MENA and ACP countries with the WTO Agreements (McQueen, 1998).

Political considerations have been particularly important in the FTAs with the MENA countries, where the EU's Barcelona Declaration in 1995, which launched the Euro-Mediterranean Partnership Agreements, explicitly referred to the need to create greater social and economic stability and economic convergence with the European Union in a region of vital interest to the security of the European Union. Nonreciprocal preferential trade agreements were seen as having failed to achieve these objectives, whereas FTAs (leading to the establishment of a Euro-Mediterranean Free Trade Area by 2010), being reciprocal, of indefinite duration, and binding on both parties, would accelerate economic development. Not only would they provide both parties with a greater certainty of preferential treatment and, it was hoped, therefore increase trade and investment, but they were also envisaged as providing greater opportunities for deepening cooperation on a bilateral basis than was possible within a multilateral framework (European Council, 2000). In addition, since the costs of terminating the agreement would be high for any MENA country, the agreements were seen as ''locking in'' essential trade and structural reforms in these countries.

Economic considerations have primarily motivated the agreements with Mexico, Chile, and MERCOSUR. First, to meet the competitive challenge posed by the United States under NAFTA and the possible establishment of the FTA, and to provide a platform for EU exports to North and South America. Second, particularly in the case of MERCOSUR (which aims to complete the formation of a single market by 2005), to preserve EU market shares and expand into new areas of exports, including services (European Commission, 2000, 2001). More generally, the fact that all of the EU's agreements cover a wide range of trade related issues, such as customs cooperation and rules of origin, com-

Table 5. *EU FTAs with developing countries*

Partner	OJ reference	Date of entry into force	Comments
Agreements concluded			
Egypt	L/345, 31.12.03	1.6.04	Euro-Med Association Agreement replacing Co-operation Agreement of 1977, signed 25.6.01
Jordan	L/129, 15.5.02	1.5.02	Euro-Med Association Agreement, replacing Co-operation Agreement of 1977
Morocco	L/70, 18.3.00	1.3.00	Euro-Med Association Agreement, replacing Co-operation Agreement of 1977
Palestinian authority	L/187, 16.7.97	1.7.97	Interim Euro-Med Association Agreement
Tunisia	L/97, 30.3.98	1.3.98	Euro-Med Association Agreement replacing Co-operation Agreement of 1977
Mexico	L/157, 30.6.00 (goods) L/70, 12.3.01 (services)	1.7.00 1.3.01	FTAs in Goods and Services, previously GSP beneficiary only
South Africa	L/311, 4.12.99	1.1.00	FTA in goods provisionally established, other elements of the Agreement to enter into force on ratification
Algeria	n/a	On ratification	Euro-Med Association Agreement replacing Co-operation Agreement of 1976. Signed 22.4.02
Lebanon	L/262, 30.9.02	1.3.03	Euro-Med Association Agreement replacing Co-operation Agreement 1977. Interim implementation on trade only
Chile	L/352, 30.12.02	1.2.03	Most trade, trade related co-operation, and institutional arrangements, provisionally applied from 1.2.03. Remainder of FTA provisions implemented on ratification

	Agreement	Negotiations started
Agreements under negotiation		
MERCOSUR (Argentina, Brazil, Paraguay, Uruguay)	FTA	2000; currently GSP beneficiaries
Syria	Euro-Med Association Agreement	1998; currently Co-operation Agreement 1.7.77
77 ACP countries		Negotiations began in 2003–04 with six regional groupings

Source: European Commission.

petition law, standards, government procurement, and investment codes; may assist the European Union in establishing EU rules and procedures in multilateral agreements and so provide a competitive advantage to EU corporations in international trade and investment.

Whether the preferential trade agreements negotiated by the European Union are able to perform any of these roles depends critically on the importance of trade with the European Union to the economy of the developing country and the precise details of the scope and

content of the agreements and their enforcement mechanisms.

4. KEY ASPECTS OF EUROPEAN UNION–DEVELOPING COUNTRY AGREEMENTS

(a) *The structure of the agreements*

A synopsis of the general structure of the EU's agreements with selected developing countries is given in Table 6.

It is important to appreciate that these agreements are substantial documents often covering over 1,000 pages of text and annexes and so the table can only provide a brief guide to a more complex reality. It does, however, illustrate two important features: First, the agreements fall short of establishing "free trade" in the normal sense of the term. Second, the agreements cover considerably more that just concessions on tariffs.

(b) *Liberalization of trade in goods*

A basic dilemma facing EU negotiators of these FTAs is that, according to their negotiating mandate, they must not undermine the finely tuned border protection of the CAP and the Common Fisheries Policy. At the same time, they must ensure that the agreement is compatible with Article XXIV of GATT 1994, particularly Section 8 requiring coverage of "substantially all trade" and the Understanding on Article XXIV (especially the preamble which states that "no major sector is excluded"). The European Union seeks to resolve this dilemma by interpreting WTO rules as requiring free trade to be established on 90% of the total bilateral trade flows. Since EU tariffs on most industrial products are zero or very low (exceptions are, for example, clothing and motor vehicles) the European Union has little difficulty in liberalizing imports of all, or practically all, industrial products. Also, since imports of agricultural products and fisheries are limited by (sometimes prohibitive) border protection they account for only a small proportion of existing total imports from the partner country. As a result, the European Union is able to make a sufficient contribution to the fulfillment of the 90% criteria by fully liberalizing imports of manufactured goods but, as shown in Table 6, only around 60% of its imports of agricultural products. Similar calculations, it is argued by the European Union, also enables the partner country to protect sensitive industrial and agricultural sectors of its economy while remaining within the EU's interpretation of requirements of Article XXIV.

The liberalization of trade in industrial products almost invariably covers all of the EU's imports from the partner country, and in the case of Egypt and Mexico, similarly covers all of their imports of industrial products from the European Union. Since the customs union agreement in industrial products with Turkey aims at eventual membership of the European Union, the agreement covers the abolition of duties on all industrial products by both parties. It is only in the case of the agreement with South Africa that 87% of its imports from the European Union are liberalized with the remaining 13% being listed for future considerations.

Tariffs are almost invariably higher in the developing countries and so the transitional period to free trade in industrial products is asymmetric, with the EU liberalization schedule being of a shorter duration than that of the partner developing country. In the case of South Africa and Egypt, this has been set at 12 years (15 years for imports of motor vehicles in the case of Egypt). This enables the developing country to spread the adjustment to free trade in industrial products over a longer period of time and enables the Government of that country to reduce its dependence on import taxes and restructure its sources of revenue. It is only in the case of Mexico that the pace of tariff reductions is a relatively short period of seven years, while free trade in industrial products has already been established between the European Union and Turkey.

The pattern of tariff reductions in the developing country usually takes the form of duties on capital and intermediate goods being abolished before those on final consumer goods, which are also subject to significantly higher initial duties and which are only liberalized toward the end of the transitional period.

It is in the area of trade in agricultural and fishery products that the agreements fall significantly short of free trade. The European Union routinely excludes or strictly limits concessions on products such as beef, sugar, a range of dairy products, some cereals and cereal products, rice, some fresh fruits and vegetables, some cut flowers, and fishery products. The partner developing country also excludes a range of agricultural products, not least to

Table 6. *Structure of EU FTAs with selected developing countries*

	Egypt	South Africa	Mexico	Turkey
Rationale				
European Union	Security	Reinforce democracy regional hub	Access to NAFTA regional hub	Customs Union agreement in industrial products. Objective of membership if European Union
Partner	Maintain preferences. Lock-in reforms. Attract FDI	Improve access to EU market. Attract FDI lock-in reforms	Reduce dominance of United States. Improve access to EU market. Attract FDI	
Transitional period				
European Union	Immediate	10 years	10 years	Turkey's customs legislation now almost same as European Union
Partner	12/15 years	12 years	12 years	
Ind. coverage				
European Union	All	Almost all, most by 2006	All by 2003	All
Partner	All, >half by year 4, end weighted on the most protected	87%, and end weighted	All by 2007, most by 2003	All
Agric. coverage				
European Union	Approximately 60%+ of imports, entry prices, plus preferences within tariff quotas. Sometimes concessions on *ad valorem* but not specific duties			Separate preferential agreement covering range of products, some with tariff quotas
Partner	Very limited; some duty reductions within tariff quotas	Substantial; some wines subject to tariff quotas	Some for example, dairy, tobacco, processed foods	
Rules of origin	EU rules. Bilateral cumulation with European Union. Derogations can be requested			EU rules
	Part MEDA cumulation an objective	Full SACU cumulation. Partial SADC cumulation with one country	Relaxation in some sectors due to lack of raw materials and components	
Safeguards	Standard EU clause for both parties + transitional arrangements for partner			EU rules
Antidumping	Standard WTO rules			
Intellectual property rights	Protected under TRIPS plus list of international agreements		Special Committee to solve difficulties	TRIPS + list of international agreements

(*continued next page*)

Table 6—*continued*

	Egypt	South Africa	Mexico	Turkey
Competition rules	Outlaws collusion/abuse of dominant position of enterprises which distorts competition in trade (except for ECSC products)	Each retain own rules. Outlaws collusion/abuse of market power etc. Co-operation + EU assistance	Own laws. Detailed statement on Co-operation. Technical assistance	EU policy
State aids	Must not distort competition in trade between the European Union and partner but are permissible for public or policy objectives (European Union. Article 92)			
Public procurement	Consultation with aim of liberalization	"fair, equitable, and transparent"	National treatment and nondiscrimination phased over 10 years except for some public utilities and transport	Agreement to be reached in the future
Rights of establishment and services	GATS plus possibility of further liberalization		Trade in most services liberalized + most modes of supply by 2004. Transitional period of 10 years. National treatment	National treatment. Services Agreement under negotiation
Capital movements	Capital relating to direct investment plus interest profits and dividends can move freely		Program of liberalization relating to investment + protection of investment	Export of large sums from Turkey unclear
Standards	Aim of reducing differences (especially SPS) and mutual recognition		Co-operation. Special Committee on SPS measures	Working toward implementation of EU rules

Custom cooperation, institutions	For example; exchange of information, introduce single administration document, simplification of controls, and procedures for clearance, co-operation on Rules of Origin			EU commercial policy and rules
	Joint European Union/Partner Association/Co-operation Council at ministerial level supported by committees (high official) and technical working groups			Association Council
				CU Joint Committee. Joint Consultative Committee
Dispute settlement	Association council by "decision" or by arbitration binding on both parties. No time limit or enforcement procedures	Coop. Council or arbitration. Stages time limited. No enforcement procedures	Joint Committee or arbitration. Rules for procedures, time limited, stages, compensation	Association Council or Arbitration
General	Political dialogue, social and cultural co-operation, democratic principles and respect for human rights, scientific, technical and technological co-operation			
Other	Money laundering, drug trafficking, migrant workers and illegal immigration, regional integration	Wine and spirits agreement, fisheries (not concluded), Regional co-operation		Turkey to adopt all of EU's preferential trade agreements

Source: Table 5, column 2; Turkey: European Communities (1996, 1998).

protect their agriculture from imports of subsidized agricultural goods from the European Union such as, beef, sugar, dairy products, and cereals. As a result, in the case of the agreement with Mexico, only 62% of bilateral trade in agricultural products is fully liberalized, while in the case of the agreement with South Africa 62% of EU imports are liberalized while South Africa fully liberalizes 82% of its imports from the European Union. No comparable figures are published for trade in agricultural produces with Egypt or Turkey.

In addition, the European Union also makes some concessions in terms of reductions or the abolition of duties within tariff quotas. In the case of fruits and vegetables (which are particularly important exports for the Mediterranean countries and South Africa), the European Union maintains in all of its agreements, the restrictions of the minimum entry price regime and calendar restrictions, although concessions may be made in either or both of these restrictions. The result is a very complex combination of EU preferences in agricultural products which may include tariff reductions, with or without quotas or the possibility of reference quantities being defined; reduced tariffs for quantities outside the quotas; reduced entry prices with or without quotas; all of which may be limited within calendar periods with the possibility of concessions here as well. The existence of tariff quotas also raises the question of who benefits from the quota rents. It is therefore very difficult to make valid generalizations about the effects of this finely tuned system of protection in terms of the extent to which the preferences (which, in any case, are *relative* to those given to other countries) are capable of stimulating increased exports from the beneficiary developing countries. Broadly speaking, it would appear that the Mediterranean countries have obtained tariff decreases without strong quantitative restrictions for the majority of their exports (Grethe & Tangermann, 1999), while the tariff quotas in the FTA for Egypt are significantly higher than the tariff quotas which they obtained under the previous Co-operation Agreement. However, the existence of these restrictions will inevitably affect the production and export decisions of producers and simple comparisons of tariff quotas with existing trade flows cannot provide a true indication of the degree of restriction imposed by the import regime of the European Union. All of the agreements have a review clause (usually three years after the implementation of the agreement) to consider whether preferences may be increased.

Processed agricultural products obtain a reduction in the agricultural element of protection commensurate with the preferences for the raw materials used in production, but this is "likely to be quite insignificant for the size of the preference margin" (Grethe & Tangermann, 1999).

Agricultural products are not included in the Customs Union Agreement with Turkey, but since the objective is full membership of the European Union, both Parties have agreed to progressively improve their preferential regime in the agricultural sector with the objective of allowing Turkey to adapt its agricultural policy to that of the Common Agricultural Policy. It should be noted, however, that no time scale has been placed on this process and that the system of preferences does not "restrict in any way the pursuance of the respective agricultural policies of the Community in Turkey." In addition, both countries have a safeguard clause which can be activated if "either quantities or the prices of imported products from the other Party in respect of which a preferential regime has been created, causes or threatens to cause a disturbance of the Community or the Turkish market." The Commission estimates that 93% of Turkey's agricultural exports to the European Union and 33% of EU agricultural exports to Turkey are covered (i.e., obtain concessions) by the 1998 scheme of preferences.

Preferences in fisheries are variable and in the case of South Africa, preferences are conditional on the latter concluding a Fisheries Agreement, which would, among other concessions, give EU vessels access to South African waters. To date, negotiations between the European Union and South Africa have been terminated without agreement. In the case of Chile, the European Union will eliminate tariffs on 91% of fish imports over the 10-year transition period.

(c) *Rules of origin*

All preferential trade agreements require rules of origin to prevent trade deflection (imports from third countries receiving preferential treatment) and the European Union insists on its own rules of origin being applied in all of its preferential trade agreements. When all of the inputs used in production originate in the

partner counter, there are clearly few problems in determining the origin. When processing or manufacturing uses imported intermediate material in production, clearly the definition of an originating product becomes more complex since both parties will wish to exclude from preferences, third country goods which have undergone only superficial working or processing in the partner country.

The EU rules are based on process criteria which start with the general rule that sufficient working or processing is obtained when the product being considered for preferential treatment is classified in a different four-digit HS tariff heading from all of the nonoriginating materials or component used in production (the CTH rule). Since, however, the Harmonized System was not designed to provide a definition of sufficient working or processing, this rule is supplemented by a "Single List" covering a very substantial number of products where specific conditions must be fulfilled rather than the CTH rule. These conditions set out definitions and specify one or more of the following: (a) the starting material(s) used in production which must originate from the partner country, (b) permitted nonoriginating materials, (c) combinations of the two, (d) maximum percentage for nonoriginating inputs (typically 40% or 50% or the ex-works price of the product).

The European Union has been subjected to a considerable degree of criticism over the past few decades in going beyond the legitimate purpose of rules of origin in preventing trade deflection and using them as a means of import protection (Ghoneim, 2003; McQueen, 1982). Developing countries, particularly in the Mediterranean region and Africa, have a relatively small manufacturing base and many exporters find it very difficult if not impossible to meet the implicit or explicit levels of local value-added required by the rules of origin. They also make little sense in a world of international production and where one of the objectives of the agreements is to integrate these economies more fully into the world economy.

The European Union seeks to mitigate the restrictive effect of the rules of origin by allowing a partner country to count imports from the European Union of intermediate products used in production as "originating" products (bilateral cumulation). The difficulty, however, is that if the European Union is not the most efficient source of supply, then bilateral cumulation will cause trade diversion. It should also be noted that the combination of restrictive rules of origin with bilateral cumulation reinforces the "hub-and-spoke effect" of the agreements, reducing the overall gains from trade and concentrating them in the European Union.

The European Union also allows a degree of regional cumulation of origin among approved groups of developing countries. The agreement with Egypt, for example, allows materials originating in Algeria, Cyprus, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey, the West Bank, and the Gaza Strip, to count as originating in the Community or Egypt when incorporating into a product produced in Egypt. The difficulty with this "diagonal cumulation" is that the imported intermediate products have to have acquired originating status in the partner country in accordance with the EU's rules of origin. Diagonal cumulation also requires 100% value added in Egypt to the materials used from the partner country. There would also appear to be some degree of variation in the rules for diagonal cumulation. For example, the agreement with South Africa only allows cumulation with one (ACP) partner country and not to the regional group (SADC) as a whole. Full cumulation is only permitted among the SACU countries. Again, as argued by McQueen (2002), the system, appears designed to promote hub-and-spoke relationships with the European Union.

Additional flexibility is provided by the "tolerance levels" of 15% of the ex-works price of the finished product and by the possibility of "derogations" from the rules of origin. However, the operation of the Lomé Convention/Cotonou Agreement over the past 30 years demonstrates that the derogation procedures are costly to use, highly restrictive in their operation, and are of little practical use.

In an interesting departure from its normal stance that the rules of origin are non-negotiable, the European Union has allowed Mexico some potentially significant relaxations in exchange for a "considerably larger market access package" for the European Union. These concessions have been made to take account of the lack of raw materials and components in Mexico, (while avoiding "simple assembly") and apply to certain sections of chemicals, components, and machinery. For other sectors such as clothing, vehicles, and complex car parts such as engines and chassis, a transitional relaxation of EU rules has been agreed to give time for Mexican industry to adapt to the EU rules origin.

(d) *Other trade related issues*

An important argument in support of FTAs is that because they are restricted to the partner countries to the agreement, they encourage deeper forms of trade liberalization than would be politically feasible within the nondiscriminatory WTO framework. Successful implementation of the FTA may then encourage the subsequent generalization of key elements of the agreement on a multilateral basis. In this respect, Table 6 shows that the agreements are disappointing, although it should be noted that in the special case of the customs union agreement in industrial products with Turkey, strenuous efforts are being made to conform to EU laws in preparation for eventual membership of the European Union. Despite covering competition law and subsidies insofar as they affect trade between the partner countries, each side, in addition, retains the right to use the protectionist WTO procedures on Antidumping and Countervailing Measures and the Agreement on Subsidies and Countervailing Measures. All of the agreements include a variety of provisions, which could significantly lower frictional barriers to trade and increase certainty of treatment, such as the harmonization of standards, certification, quality assurance, and enforcement procedures. None of the agreements, however, includes a timetable for these improvements, far less for the mutual recognition of standards and procedures. In addition, although there are dispute settlement procedures, both parties retain the right to substitute the more limited WTO Disputes Settlement procedures. Similarly, empirical evidence suggests that substantial gains could accrue to the developing country partners from the inclusion of services and rights of establishment in the FTAs (Hoekman & Konan, 1999). Only the agreements with Mexico and Chile provide for a substantial liberalization of services, while the Euro-Med Agreements and the FTA with South Africa merely state that this is an objective for negotiation at an unspecified time in the future.

A further potential ''nontraditional'' gain (Fernandez & Portes, 1998) from these agreements is to provide credibility to the economic reforms of the government of the developing country because, it is argued, they ''lock in'' liberalization measures and sound economic policies (see, e.g., Collier & Gunning, 1995). It is also argued that scheduling the abolition of trade restrictions with the European Union signals to the world that the developing country considers that it will be able to compete with EU imports. None of the EU's agreements, however, cover macroeconomic policy, privatization, and deregulation, while only the agreements with Mexico and Chile make specific provisions for the liberalization of certain public procurement markets. In addition, the agreements include the EU's standard safeguard clauses against preferential imports which cause or threaten to cause serious difficulties to a sector or region in either country. The extent of ''credibility'' or ''signaling'' conferred by the agreements has therefore been questioned (McQueen, 2002) both in terms of the exclusions and limitations of the agreements and the plausibility of the European Union enforcing the agreement on a developing partner country at a time when it is probably subject to severe economic problems.

5. EMPIRICAL ANALYSIS OF THE ACTUAL AGREEMENTS

(a) *Methodology*

The effects of the FTAs have been estimated through the application of a global general equilibrium model that reflects post Uruguay Round trade policy data. The model is characterized by an input–output structure (based on regional and national input–output tables) that explicitly links industries in a value-added chain from primary goods, over continuously higher stages of intermediate processing, to the final assembling of goods and services for consumption. Intersectoral linkages are direct, like the input of steel in the production of transport equipment, and indirect, via intermediate use in other sectors. The model captures these linkages by modeling firms' use of factors and intermediate inputs. The most important aspects of the model can be summarized as follows: (i) it covers all world trade and production; (ii) it allows for medium- to long-run investment effects on the installed stock of capital; (iii) it includes intermediate linkages between sectors.

Our data come from a number of sources. Data on production and trade are based on national social accounting data linked through trade flows (see Reinert & Roland-Holst, 1997). These social accounting data are drawn directly from the GTAP dataset (Dimaranan & McDougall, 2002). The GTAP version 5 data-

set is benchmarked to 1997, and includes detailed national input–output, trade, and final demand structures. The basic social accounting and trade data are supplemented with trade policy data, including additional data on tariffs and nontariff barriers. Post Uruguay Rounds tariff data are from Francois and Strutt (1999) while ATC quota price wedges are from Francois and Spinanger (2002a). Remaining Uruguay Round tariff and quota commitments are imposed on the benchmark data before policy experiments are conducted. Data are aggregated into 24 sectors and 30 regions (listed in Tables 7 and 11). Egypt is not in the core GTAP database, and so we model the Egypt agreement on the basis of a modified version of the database that also includes an estimated SAM for Egypt for 1997, and mapped to the same model (see Francois & Spinanger, 2002b). NTBs are modeled as export taxes for textiles and clothing (though we remove the textile and clothing protection as part of the baseline), and as a mix of import and export taxes in agriculture (see Dimaranan & McDougall, 2002, for specific details).

Computationally, our starting point is the standard version of the GTAP model, modified to include savings–investment linkages. This is a multisectoral model with sectors linked directly through intermediate linkages and indirectly through factor market demands and includes an explicit treatment of production and bilateral trade flows (Brockmeier, 2001; Hertel, 1997). The effects of the FTAs comprise the static effects (where resources are fixed), corresponding to the combination of efficiency and consumption gains emphasized in trade theory, and dynamic effects which incorporate the medium- and long-run linkages between the FTAs, changes in the level of investment, and consequent changes in the capital stock (see Francois, McDonald, & Nordstrom, 1996).

In all regions there is a single representative, composite household in each region, with expenditures allocated over personal consumption and savings (future consumption) and over government expenditures. The composite household owns endowments of the factors of production and receives income by selling them to firms. It also receives income from tariff revenue and rents accruing from import/export quota licenses (when applicable). There is an implicit nondistortionary income tax in the model that adjusts to replace revenue lost by tax reductions, such as tariff reductions. Part of the income is distributed as subsidy payments to some sectors, primarily in agriculture. Welfare effects are calculated as equivalent variation to the policy experiments considered, based on the estimated impact on prices and incomes.

On the production side, in all sectors, firms employ domestic production factors (capital, labor, and land) and intermediate inputs from domestic and foreign sources to produce outputs in the most cost-efficient way that technology allows. Perfect competition is assumed, and products from different regions are assumed to be imperfect substitutes in accordance with the so-called ''Armington'' assumption. Prices on goods and factors adjust until all markets are simultaneously in (general) equilibrium. This means that we solve for equilibria in which all markets clear. Our macroeconomic closure involves a fixed net capital account. Hence, while we model changes in gross trade flows, we do not model changes in net international capital flows. Rather our capital market closure involves fixed net capital inflows and outflows. This does not preclude changes in gross capital flows. (See the Hertel, Ianchovichina, & McDonald, 1997, discussion on macroeconomic closure. The present approach facilitates welfare analysis.) To summarize, factor markets are competitive, and labor and capital are mobile between sectors but not between regions. All primary factors, labor, land, and capital are fully employed within each region.

The effects of the actual agreements are based on matching, as closely as possible, the degree of trade liberalization (full, partial, and excluded products) in the agreements with the 24 sectors in the model. In the case of the agreement with MERCOSUR (which is currently under negotiation) it was assumed that the liberalization of bilateral trade would cover all manufactured goods, 75% of processed food, 50% of agricultural products, and excludes meats and sugar.

(b) *Trade and production effects*

The overall trade impact of the agreements can be proxied by the percentage change in export value (note that this does not indicate the welfare effects of the agreements). A large proportion of the EU's imports from the developing country with which the European Union has concluded FTAs were already subject to zero or very low rates of duty either because they were raw materials, industrial goods, or noncompeting agricultural products subject to

low MFN duties, or because they already received unilateral preferences under bilateral schemes (Mediterranean countries) or the GSP (Latin America and South Africa). The additional concessions, which have been offered by the European Union in the FTAs, are very limited. As a result, preferential access under the FTAs can be expected to lead to only a very small increase in the existing level of exports of the partner developing countries. Our estimates of the percentage change in export value [5] range from 0.1% for Egypt, 2.8% for Mexico, 3.5% for Chile, 5% for MERCOSUR, 6.4% for South Africa, and 14.1% for Turkey. At the same time, agreements with third countries erode the value of individual agreements somewhat.

The present level of border restrictions of many developing countries remain at substantial levels despite recent programs of liberalization. The simple average level of tariffs in Egypt in 2002 was recorded as 18.4% with 44.6% of the tariffs being over 15%. South Africa has engaged in a vigorous program of liberalization in recent years and as a result its simple average level of tariffs in 2001 was 9.8%, but 38% of its tariffs were over 15% (World Bank, 2004). Adjustment to the terms of the FTA will therefore result in a significant decrease in import duties. Equally significant are the numerous administrative ''red tape'' barriers to trade which may have to be removed or greatly simplified as a result of the agreement. If this is combined with a significant share of the European Union in total imports, then the potential gains from trade creation may be significant. For this reason, the growth in trade is more readily attributed to one's own liberalization than to liberalization with the European Union. As a result of such liberalization, producers will have access to lower cost intermediate products and capital goods and consumers will be offered a wider variety of goods at lower prices.

Welfare effects (proxied by real income) are reported in Table 7. These are based on the change in economic welfare that follows from each RTA. They show that the European Union gains most, in economic terms, from the full set of agreements studied. The benefits for the European Union are estimated to be in the range of $9.1 billion annually (based on 1997 GDP). Most FTA partners (except Egypt) benefit from the direct effects of the agreement. [6] However, as in trade, the effects of agreements with third countries limit economic gains. In addition, some third countries, such as Botswana, North Africa, and the Middle East, are hurt by the agreements. The results for Botswana (with a loss of about $377 million annually) point to losses for Southern Africa in general. [7]

The BNLS (Botswana, Nambia, Lesotho, and Swaziland) countries face, as a result of the combination of the customs union agreement with South Africa (SACU) and the European Union–South Africa (RSA) FTA, increased competition from the European Union, both in their exports to, and in their imports from, South Africa and will incur a loss of tariff revenue (significant for Lesotho and Nambia) from the common revenue pool. These countries also have only preferential access to the European Union through the Cotonou Agreement, the trade component of which is due to expire in 2008. Even if future negotiations extended the European Union–RSA agreement to the BNLS countries it is unlikely to include Botswana, Nambia, and Swaziland's current preferences for beef and sugar as these products are excluded from the European Union–RSA agreement (though the legality of withdrawing sugar preferences could be legally challenged as these are, under the Sugar Protocol, of ''indefinite duration'').

South Africa is also a member of SADC and these southern African countries will face a loss of regional trade with South Africa as a result of the trade creation effects of the FTAs. In addition, unless South Africa offers the SADC countries preferences equivalent to those available to the European Union there could also be significant trade diversion against SADC. These negative effects on regional trade are reinforced by the EU rules of origin which allow South Africa to cumulate origin with only one ACP (including SADC) country, while the producer in South Africa has to add 100% to the value of imports of intermediate products from the regional partner in order to qualify for preferential entry into the EU market.

It should also be noted that the ACP (including SADC) countries have no automatic right to include imports from South Africa as originating products when claiming preferences in their exports to the European Union under the Cotonou Agreement. In the case of the Mediterranean countries, Egypt (but not other Mediterranean countries, such as Morocco and Tunisia) can, technically, cumulate origin with other Mediterranean countries and Turkey (subject to some restriction) but only provided that these intermediate products have

acquired originating status under the EU rules of origin in the partner country.

These considerations apply to the ultimate effect of the FTA on the allocation of resources once the agreement has been fully implemented. As we have noted, however, the pattern of tariff reduction in countries like Egypt and South Africa is generally to eliminate tariffs on capital goods and intermediate goods where tariff levels are already fairly low and to delay tariff reductions on the more highly protected consumer goods industries to the latter part of the transitional period. The result of this is to increase the variance of effective rates of protection during most of the transitional period, with some liberalized sectors quite possibly being subject to significant negative rates of protection. The increase in the variance of effective rates of protection will increase the degree of price distortion in the economy and the consequent adverse resource pull effects of the structure of protection, reducing the incentive to engage in rapid restructuring of the economy and creating an incentive for scarce resources to be allocated to sectors of the economy where there is a short-term increase in levels of protection (and therefore in profitability). A study (Hoekman & Djankov, 1997) simulating the effects of applying the Tunisian tariff reduction scheme in the European Union–Tunisia FTA to Egypt showed an increase in the average dispersion of effective rates of protection (ERP)

Table 7. *The global impact of regional agreements on real income (millions of dollars annually)*

	South Africa FTA	Mexico FTA	Chile FTA	MERCOSUR FTA	Turkey Customs Union	Egypt FTA	Total
Australia and New Zealand	−38	15	−11	−49	−1	−4	−88
China	−52	−31	−28	−81	−312	−7	−512
Hong Kong	1	−4	0	−4	−12	−1	−20
Japan	−118	−204	−29	87	−240	−35	−540
Korea	−61	−12	−31	−58	−128	−4	−293
Taiwan	−44	−44	−7	−31	−112	−2	−240
ASEAN5	−55	6	1	−63	−195	−5	−311
Vietnam	0	2	0	−7	−11	0	−18
Bangladesh	0	−1	−1	0	−13	0	−13
India	−54	−22	−7	−42	−155	−3	−284
South Asia	−7	−5	0	−6	−43	−1	−61
Canada	−6	−3	−8	−47	−17	−2	−83
Mexico	−1	4,079	−239	−367	−119	−1	3,353
United States	−48	−256	−102	−315	68	−20	−673
CBI	0	11	1	0	8	−1	20
ATP	−10	60	−21	−19	−9	−2	−1
MERCOSUR	−53	1	−43	2,302	−2	−2	2,196
Chile	−9	17	312	−27	−2	−1	291
Other Latin America	1	1	1	14	2	0	19
European Union	1,135	2,652	879	3,960	152	302	9,080
CEA	−21	−42	−12	−62	−70	−2	−210
Turkey	−15	−20	−6	−34	2,237	0	2,161
SACU	727	3	−11	−36	−12	−1	670
Botswana	−384	16	1	−13	3	0	−377
Malawi	4	−1	0	1	0	0	4
Mozambique	2	0	0	2	1	0	4
Rest of Southern Africa	−8	−6	−9	−46	3	−2	−68
Egypt	3	1	−3	−17	−18	−770	−805
North Africa and Middle East	24	13	−34	−177	−191	−1	−366
Rest of the world	8	−17	−33	−171	−271	−13	−498

from an initial level of 66% to a level of 73% by year six of the 12-year transitional period. Sectors such as clothing, glass products, footwear, and transport equipment experienced increased ERP's by year six, while chemicals, crude petroleum, mineral products, machinery and appliances, and petroleum refining faced negative ERPs (effectively a tax on production).

This is contrary to the purpose of the transitional arrangement and as effective rates of protection decrease sharply toward the end of the transitional period, many producers may be inadequately prepared to meet increased competition from the European Union.

The limited additional concession by the European Union in agriculture products combined with the potentially negative static welfare effects of the agreement raises the question of the effect of these agreements on the poorest sections of the population. The effects of trade liberalization on the poor are complex (see, e.g., Winters, 1999) and the additional complexities of these FTAs make it impossible to make valid generalizations about their likely effects. What we can say, however, is that greater access to the EU market for agricultural products could have significant effects on the demand for unskilled agricultural labor. In the case of South Africa, for example, it has been shown (McDonald & Punt, 2001) that increased exports of wine, table grapes, and deciduous fruits have the potential to make a significant contribution to increasing employment and rural incomes, especially among farm worker households. These are, however, precisely the areas of the European Union–South Africa agreement which have either been excluded by the European Union from preferences or granted preferences within tariff quotas.

As one rough measure of the distributional impact of agreements, Table 8 reports estimated wage effects for unskilled workers. In general (and due to the exclusion of agriculture as a general rule), unskilled worker gains are somewhat limited. They are positive and substantial for Turkey, Chile, and South Africa. At the same time, third countries in Southern Africa (see Botswana) are hurt.

It should also be noted that the partial implementation of the South Africa Agreement means that financial assistance is not available for structural adjustment until the Agreement is ratified by all of the EU member states. Experience suggests that this may take several years, particularly following the break-up of the negotiation of a Fisheries Agreement and the possibility of renewed opposition to the agreement by some of the EU member states.

Table 8. *The global impact of regional agreements on real wages of unskilled workers (% of real wages)*

Increases of > +0.1%	
Turkey (2.2%)	SACU (1.4%)
Mexico (1.1%)	Chile (0.9%)
MERCOSUR (0.3%)	European Union (0.3%)
Other L.A. (0.2%)	
Decreases of > −0.1%	
Botswana (−9.9%)	Egypt (−4.5%)

6. A COMPARISON WITH BILATERAL FREE TRADE

As noted above, a common feature of EU FTAs is the exclusion of sensitive sectors, especially in food and agriculture. We now turn, briefly, to the implications of these exclusions. Table 9 presents the estimated effects (expressed as gains relative to 1997 GDP) for actual agreements, and a hypothetical extension of these agreements to include all food and agriculture sectors. Table 10 presents the dollar impact of the actual agreements.

Not surprisingly, it is the potential agricultural exporters to the European Union (Chile, MERCOSUR), who would benefit the most from the extension of existing agreements to simple free trade, including all food and agriculture sectors. Egypt would also witness significant gains from the extension of existing agreements to full bilateral free trade. For Turkey and Mexico, the current agreement is almost equivalent to a full agreement. SACU would experience a slightly smaller gain from a full FTA compared to the actual FTA. The significant loss to Botswana from the actual FTA would be only very slightly reduced by a full bilateral FTA and the losses would be even greater if full FTAs were implemented for all of the countries analyzed, while Malawi would gain more from full FTAs.

In contrast, third countries and regions witness relatively small changes either from the actual European Union–developing country FTAs or their extension to simple free trade.

What is the impact of the EU? One perspective is provided in Tables 7–10. Table 11 provides another view, based on estimated

Table 9. *A comparison of actual and full FTAs (% impact on national incomes)*

	South African FTA		Mexico FTA		Chile FTA		MERCOSUR FTA		Turkey Customs Union		Egypt FTA		Total	
	Actual FTA	Full FTA	Actual FTA	Full FTA	Actual FTA	Full FTA	Actual FTA	Full FTA	Actual FTA	Full FTA	Actual FTA	Full FTA	Actual FTA	Full FTA
European Union and partner countries														
European Union	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2
SACU	0.6	0.5	0.0	0.0	0.0	0.0	0.0	−0.1	0.0	0.0	0.0	0.0	0.6	0.4
Mexico	0.0	0.0	1.2	1.3	−0.1	−0.1	−0.1	−0.2	0.0	0.0	0.0	0.0	1.0	1.0
Chile	0.0	0.0	0.0	0.0	0.4	1.0	0.0	−0.1	0.0	0.0	0.0	0.0	0.4	0.9
MERCOSUR	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.2	0.6
Turkey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.4	0.0	0.0	1.3	1.3
Egypt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−1.1	0.5	−1.1	0.5
Selected third countries and regions														
Central and East European Associates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−0.1	−0.1
Other Latin America	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.1
Botswana	−9.0	−8.5	0.4	0.1	0.0	0.0	−0.3	1.1	0.1	0.0	0.0	0.0	−8.8	−9.6
Malawi	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.6
Mozambique	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
Rest of Southern Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Africa and the Middle East	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−0.1	0.0	0.0	0.0	0.0	−0.1	−0.1
Rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 10. *National income effects of the actual agreements (millions of dollars annually)*

	South African FTA	Mexico FTA	Chile FTA	MERCOSUR FTA	Turkey Customs Union	Egypt FTA	Total
European Union and partner countries							
European Union	1,135	2,652	879	3,960	152	302	9,080
SACU	727	3	−11	−36	−12	−1	670
Mexico	−1	4,079	−239	−367	−119	01	670
Chile	−9	17	312	−27	−2	−1	3,353
MERCOSUR	−53	1	−43	2,302	−2	−9	2,196
Turkey	−15	−20	−6	−34	2,237	0	2,161
Egypt	3	1	−3	−17	−18	−770	−805
Selected third countries and regions							
Central and East European Associates	−21	−42	−12	−62	−70	−2	−210
Other Latin America	1	1	1	14	2	0	19
Botswana	−384	16	1	−13	3	0	−377
Malawi	4	−1	0	1	0	0	4
Mozambique	2	0	0	2	1	0	4
Rest of Southern Africa	−8	−6	−9	−46	3	−2	−68
North Africa and the Middle East	24	13	−34	−177	−191	−1	−366
Rest of the world	−483	−505	−274	−807	−1,444	−101	−3,615

Table 11. *The impact of the actual agreements on EU production (% change)*

	South African FTA	Mexico FTA	Chile FTA	MERCOSUR FTA	Turkey Customs Union	Egypt FTA	Total
Grains	−0.1	0.0	−0.1	−0.6	0.0	0.0	−0.8
Other agriculture	−0.1	−0.1	−0.1	−0.3	0.1	0.0	−0.5
Mining	0.1	0.0	0.0	0.2	0.0	0.0	0.3
Other primary production	−0.1	0.0	0.0	0.0	0.0	0.0	0.0
Sugar	0.0	0.0	0.0	−0.2	0.0	0.0	−0.3
Dairy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meats	−0.3	0.0	0.0	0.0	0.0	0.0	−0.4
Processed foods	0.1	0.0	−0.1	−0.4	0.0	0.0	−0.3
Textiles	0.0	0.1	0.0	0.1	−0.3	0.0	0.0
Clothing	−0.1	0.5	0.0	0.1	−1.9	0.0	−1.3
Leather	0.1	0.0	0.0	−0.7	0.5	0.0	0.0
Wood and paper	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Chemicals	0.0	0.1	0.0	0.2	0.1	0.0	0.3
Refineries	0.0	0.1	0.0	0.1	0.0	0.0	0.2
Steel	−0.1	0.1	0.1	0.2	0.1	0.0	0.4
Nonferrous metals	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Motor vehicles	0.1	0.2	0.1	0.6	0.3	0.0	1.3
Electronics	0.0	0.0	0.0	0.0	−0.1	0.0	−0.1
Others	0.0	0.0	0.1	0.2	0.1	0.0	0.4
Machinery manufactures	0.1	0.1	0.0	0.1	0.0	0.0	0.2
Trade, transport, and communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	0.0	0.1	0.0	0.1	0.0	0.0	0.2
Business services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other services	0.0	0.0	0.0	0.0	0.0	0.0	0.1

changes in output. The benefits for the European Union are estimated to be in the range of $9.1 billion annually (based on 1997 GDP). This somewhat overstates the picture and, in general, the combined effects of these agreements are very small. The increase in EU real income (welfare) is in the range of 1%. Industry output effects are small (less than 1%). The notable exceptions are in clothing where Turkey exerts significant pressure, and automobiles, where the European producers gain from improved market access in South Africa, MERCOSUR, and Turkey. Overall though, the agreements make very little difference in the long run, economically, to Europe.

7. CONCLUSIONS

This overview reaches three broad conclusions.

First, in assessing these FTAs, it is important to appreciate that, as a result of a lack of precision in the wording of Article XXIV of GATT 1994 (despite the Uruguay Round "Understanding on the Interpretation of Article XXIV") which requires FTAs to cover "substantially all trade," they fall substantially short of creating free trade between the European Union and partner developing countries. In particular, EU restrictions, both in product coverage and in rules of origin, adversely affect trade in agricultural goods and labor-intensive manufacturers and this significantly reduces the potential gains from trade liberalization from an FTA with the European Union for the developing countries.

Second, an assessment of the current content of the agreements indicates that only the agreements with Mexico, Chile (in service), and Turkey (because it is a candidate for membership of the European Union) can be said to be wider and deeper than commitments available under the WTO agreements. In this sense, there is little evidence supporting the view that the agreements could potentially provide the nontraditional gains discussed in the literature.

Third, the negotiation of bilateral trade agreements is not without costs. It requires the use of negotiating capital (scarce human capital and related resources) that might also be devoted to other issues, such as, WTO-based multilateral negotiations. Multilateral, broad based liberalization offers the opportunity for terms of trade losses and gains to cancel so that efficiency and procompetitive gains can dominate the net effects of trade liberalization (i.e., trade diversion effects are more likely to cancel). Recent estimates (Francois, 2001; Francois, van Meij, & van Tongeren, 2002), for example, suggest that real income gains for developing countries, in the context of the Doha Development Agenda, could outweigh recent annual flows of official development aid from the industrialized countries. Such gains hinge, critically, on mutual trade liberalization between the developing countries, an issue completely outside the scope of European Union–developing country FTAs. In this respect, much of the gains to the developing countries in the Euro-Med agreements and the agreement with South Africa could equally well have been achieved through unilateral trade liberalization and reform, combined with increased aid and technical assistance. In the case of Egypt, the limited amount of reforms means that we are moving toward regional free trade with many domestic distortions (see Francois & Spinanger, 2002b; WTO, 1999) while still in place. The result is a significant loss for the Egyptian economy.

The agreements, however, are of comparatively recent origin and the provisions for further negotiations may enable them to go significantly beyond WTO commitments in the future and in turn provide "stepping stones" for liberalization on an MFN basis. On the other hand, a direct approach to the liberalization of market access through the WTO provides a much broader avenue for developing country gains than is available under the bilateral approach. Based on recent estimates (see Anderson *et al.*, 2002), the likely gains from such an approach appear to outweigh anything possible from the combined effect of development assistance and bilateral agreements.

NOTES

1. MERCOSUR is a regional grouping of Argentina, Brazil, Paraguay, and Uruguay.

2. For details of the GTAP model, see Hertel (1997) and www.gtap.agecon.purdue.edu.

3. In the case of Turkey, we model the Customs Union agreement along similar lines.

4. GTAP 5 data provide MFN tariffs, not preferential tariffs, and so Table 3 rates are a little higher than actual applied rates.

5. These are based on the data in GTAP 5 which provide MFN tariffs, not EU preferential tariff rates, and so our estimates may produce a larger increase in exports to the European Union than will actually be the case. We would not, however expect this to be a significant difference because (a) in the absence of an FTA, the developing countries would have had to rely on the EU's GSP which provides only a small margin of preference for sensitive industrial goods and excludes sensitive agricultural products and (b) the limited impact of the GSP has been confirmed by one of the authors using a prerelease version of GTAP 6 (which provides preferential tariff rates).

6. Our findings of welfare gains for both the European Union and its agreement partners are consistent with other GTAP based studies. See, for instance, Lewis *et al.* (1999, 2002) and McDonald and Walmsley (2003) on South Africa as well as Zahariadis (2002) on Turkey. Using a dynamic computable general equilibrium model, Dessus and Suwa-Eisenmann (1998) find that a linear reduction in Egyptian import tariffs on EU manufactures leads to a welfare loss of 0.18% for Egypt.

7. Welfare losses for Botswana and Southern African from the European Union–South Africa FTA (see Tables 7 and 8) are confirmed by the GTAP study of McDonald and Walmsley (2003) who find that the losses in Botswana and rest of SADC are $71.5 million and $14.2 million, respectively. Meanwhile, the GTAP studies by Lewis *et al.* (1999, 2002) report that the impact of the European Union–South Africa FTA on other SADCX countries is small.

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