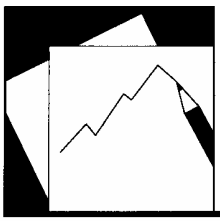
WP/03/206



IMF Working Paper

The United States and the New Regionalism/Bilateralism

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INTERNATIONAL MONETARY FUND

 WP/03/206

IMF Working Paper

Policy Development and Review Department

The United States and the New Regionalism/Bilateralism

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October 2003

Abstract

Current U.S. trade policy stresses establishing free trade areas (FTAs) with partners spanning the globe. Motivations include enhancing goods and services trade; stimulating investment flows; extending standards on intellectual property rights, labor, and the environment; and addressing geopolitical concerns. Simulations of FTAs with the United States highlight the importance of trade complementarity, trade diversion, and welfare losses for nonmembers. Agriculture and textiles play a central role in determining welfare outcomes. Initial improvement in market access enjoyed by participants could be eroded progressively as global liberalization proceeds, and this preference erosion might act as a disincentive to participate in multilateral liberalization.

JEL Classification Numbers: C15, F15, F47

Keywords: integration, regionalism, free trade, global trade analysis, United States

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[1]The authors wish to thank Hans Peter Lankes, Christopher Towe, and Charles Collyns for their helpful comments on this and earlier versions, without implication for any remaining errors, and Dustin Smith for his invaluable research assistance. A condensed version of this paper appeared in the Selected Issues Paper accompanying the Staff Report for the United States 2003 Article IV Consultation. See IMF Country Report No. 03/245 at *http://www.imf.org/external/pubs/ft/scr/2003/cr03245.pdf*.

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I. INTRODUCTION

The currents underlying trade liberalization are presently at a fascinating juncture—midway through an ambitious round of multilateral trade negotiations, alongside a renewed frenzy of forging regional agreements. The world's largest economy, the United States, provides one of the starkest representations of this phenomenon, tabling bold proposals at the World Trade Organization (WTO) for global reductions in tariff and nontariff barriers while simultaneously launching discussions for free trade areas (FTAs) with partners in the Americas, Africa, the Pacific, and the Middle East.

The present momentum toward regionalism is so well advanced in the United States and elsewhere[2] that there is very little debate as to whether the policy itself should be pursued; instead, discussion tends to turn on "second-order" questions such as what other countries should be included and how fast the arrangements could be concluded. This paper examines the principal issues raised by the U.S. emphasis on regional and bilateral trade links, drawing lessons from simulations of three free trade arrangements with the United States. The simulations also give insight into the implications of pursuing a strategy of "additive regionalism"(successively concluding FTAs with major trading partners), the potential effects of FTAs on incentives to participate in multilateral liberalization, and the importance of liberalization of agriculture and textiles and clothing.

The paper is laid out as follows. Section II reviews the scope of current and proposed arrangements, exploring in particular the current trading relationships. Section III lays out the main issues of concern with regards to the new arrangements and some of the features that they should encompass in order to complement global market opening. In order to concretize the analysis, Section IV presents the results and implications of stylized simulations of three FTAs—United States/Chile, United States/Central America, and United States/Australia—and a review of other similar studies. Section V concludes.

II. THE SCOPE OF U.S. FREE TRADE ARRANGEMENTS

The United States has embarked on a new thrust to increase its participation in regional and bilateral trading arrangements over the next few years. Following the long-standing (since 1985) FTA with Israel, the United States established an FTA with Canada in 1989 which subsequently evolved into the North American Free Trade Agreement (NAFTA) by including Mexico in 1993. Since then, an FTA was set up with Jordan in 2001, and arrangements with Singapore and Chile have been signed. The U.S. administration has formally stated its intention to launch FTAs with Morocco, the five countries of the Central American Free Trade Agreement (CAFTA) (Costa Rica, El Salvador, Guatemala, Honduras,

[2] For example, in the last five years, the European Union has completed negotiations for FTAs with South Africa, Mexico, Chile, Croatia, the FYR of Macedonia, and a number of Mediterranean partners, while negotiations continue with Mercosur, the Syrian Arab Republic, and the Gulf Cooperation Council (see Lamy, 2002).

and Nicaragua), Australia, and the members of the Southern African Customs Union (SACU: Botswana, Lesotho, Namibia, South Africa, and Swaziland) before the end of 2004. Negotiations are also continuing to form the Free Trade Area of the Americas (FTAA) with 33 other democratic nations of the Western Hemisphere by 2005.[3]

More recently, the U.S Administration has unveiled the broad outlines of a strategy to enhance trading relations with the Middle East. The key components of this program involve: (a) expanding the U.S. Generalized System of Preferences (GSP) to the poorer countries of the region; (b) assisting Middle East countries which are not yet members of the WTO (such as Saudi Arabia) to join; (c) completing the FTA with Morocco and possibly "docking in" other countries to the treaty; (d) launching new FTAs with selected countries—initially Egypt and Bahrain; and (e) eventual establishment of a free trade agreement between the Middle East countries (as a bloc) and the United States.

For the United States, part of the fresh excitement with forging new bilateral and regional trade ties is linked to geopolitical and security considerations, in which trade agreements are seen as a vehicle for deepening political relationships and/or combating terrorism—a prime consideration in the treaties with the Middle East nations. Free trade areas are also viewed as helping to increase market access for U.S. exporters by jumping over high trade barriers (e.g., in SACU), as well as countering preferences in other bilateral/regional accords to which the United States is not party, e.g., Mexico/Chile, Canada/Chile, or the various European Union agreements. The Administration has also argued that this approach can complement multilateral trade liberalization by helping to forge common negotiating positions with partners, or compensate for slow progress in these negotiations.

Trade in goods per se, except perhaps in specific sectors, appears not to be a dominant driving force for the United States—as Table 1 shows, apart from NAFTA members, U.S. exports of goods to other potential partners are not significant as a share of total exports—less than 3 percent for Australia, Bahrain, Chile, Egypt, Israel, Jordan, Morocco, Singapore, SACU, and CAFTA individually. On the other hand, the partners rely much more on their trading relationship with the United States and the shares of exports to the U.S. market have generally increased over time (Table 2), for example, to over one-third of Israeli exports and about one-half of CAFTA's exports. Although the U.S. market is not currently a principal destination for Middle Eastern countries' exports, the jump in the share of Jordan's exports to the United States from 1 percent to 10 percent between 1997/99 and 2000/02 shows the latent potential for rapid expansion of trade flows under FTAs.

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[3] See USTR (2003) for further details. The Report also talks of the intention to achieve free trade and investment within the Asia Pacific Economic Cooperation (APEC) forum over the longer term. In August 2003, Congress was notified of the Administration's intention to integrate the Dominican Republic into an FTA with Central America.

Table 1. United States: Existing and Proposed Free Trade Arrangements
(Data refer to 2002)

	Year of Agreement	U.S. Exports to Partner (US$m)	As Percent of Total U.S. Exports	Partner Exports to United States (US$m)	As Percent of Total Partner Country Exports
Israel	1985	7,039	1.0	11,494	39.3
NAFTA	1993	258,330	37.3	345,059	85.8
Canada		160,799	23.2	221,292	87.7
Mexico		97,531	14.1	123,767	82.7
Jordan	2001	404	0.1	398	14.5
Singapore	2003	16,221	2.3	19,106	15.3
Chile	2003	2,612	0.4	3,484	19.1
Morocco	2003	566	0.1	386	4.8
CAFTA	2003	9,840	1.4	11,325	49.9
Costa Rica		3,132	0.5	3,036	31.5
El Salvador		1,665	0.2	1,853	63.3
Guatemala		2,042	0.3	2,706	58.7
Honduras		2,565	0.4	3,088	69.5
Nicaragua		438	0.1	643	59.4
Australia	2004	13,084	1.9	6,248	9.6
SACU	2004	2,525	0.4	3,802	12.8
Bahrain	2005	419	0.1	381	4.5
Egypt	2005	2866	0.4	1,288	18.4
FTAA	2005	309,516	44.7	411,085	67.5
Of which :					
Argentina		1,591	0.2	3,120	10.9
Brazil		12,409	1.8	15,202	24.3

Source: IMF, *Direction of Trade Statistics* .

Notes: NAFTA denotes North American Free Trade Agreement; CAFTA denotes Central American Free Trade Agreement; SACU denotes Southern African Customs Union; and FTAA denotes Free Trade Area of the Americas.

Much of the economic impetus for the FTAs therefore lies outside of merchandise trade. The United States, as the world's principal exporter of services, has a particular vested interest in market opening in this area. **Rules on liberalizing services as well as on such matters as intellectual property rights, the environment, labor standards and provisions for uninhibited capital transfers are now standard components of the new genre of FTAs.** Many of the partners of the United States in fact view the likely stimulus to direct foreign investment as even more critical than market access in goods, especially since their goods may already have preferential entry terms to the United States although on a discretionary basis (such as under the GSP, Caribbean Basin Initiative (CBI), and African Growth and Opportunity Act (AGOA)).

Table 2. Evolution of Trade: United States and Free Trade Partners
(percent of partner exports to United States)

	1990–93	1994–96	1997–99	2000–02
Israel	30	31	35	38
NAFTA	78	82	86	87
Canada	78	82	86	88
Mexico	78	84	87	87
Jordan	1	1	1	10
Singapore	21	18	19	16
Chile	17	15	15	18
Morocco	3	3	4	5
CAFTA	43	38	35	45
Costa Rica	49	40	20	21
El Salvador	33	29	20	35
Guatemala	38	33	51	58
Honduras	52	47	50	70
Nicaragua	25	39	40	43
Australia	10	6	9	10
SACU	7	5	7	12
Bahrain	4	3	2	5
Egypt	10	13	12	13
FTAA	60	62	66	70
Of which:				
Argentina	11	9	9	11
Brazil	21	20	19	24

Source: IMF, *Direction of Trade Statistics*

Notes: NAFTA denotes North American Free Trade Agreement; CAFTA denotes Central American Free Trade Agreement; SACU denotes Southern African Customs Union; and FTAA denotes Free Trade Area of the Americas.

III. Principal Issues in the New Regionalism

The combination of economic, political and security motivations has clearly been strong enough to drive the pursuit of FTAs with the United States, and there is little discussion now about changing course. Accepting this momentum as given, it is nonetheless important to take into account several factors as the strategy is implemented. Six principal concerns can be distilled, related to possibilities of trade diversion, a slackening of the drive towards multilateral liberalization, the higher cost of nonparticipation as FTAs proliferate, high administrative costs, vulnerabilities associated with reliance on regional preferences, and integrating new components into FTA, such as on capital flows, labor and the environment.

(i) A standard concern in the economic analysis of preferential trade arrangements is the possibility that, **as trade barriers are lowered between partners, trade may be diverted away from lower-cost suppliers that are not members of the arrangement**.[4] This is because the higher tariff on their goods may now make them more expensive than imports from members (which may be produced at a higher cost but now incur a lower or zero tariff). The welfare losses from trade diversion are related to the fact that when the importing country buys from a costlier source, resources are shifted towards less efficient producers. On the other hand, the possibility of trade creation must also be acknowledged, whereby because of a reduction in tariffs, imports from partners may actually supplant costly local production. [5] Overall, therefore, the net welfare effect on members and the global economy of a preferential trade arrangement is uncertain.

(ii) **Concentration on building bilateral and regional alliances may distract from and dilute the momentum towards multilateral trade liberalization.** Failure to meet several deadlines at the WTO, culminating in the deadlock at the Cancún Ministerial meetings in September, has already shaken confidence in the pace and eventual content of the Doha Development Agenda. In this climate, the U.S. leadership role is key and its focus on bilateralism/regionalism may influence other countries to reduce their willingness to offer concessions on a multilateral basis, and instead save their offers for bargaining at a regional level. Similarly, the United States may find itself tempted to reserve some preferences for the FTAs. For example, if implemented globally, its WTO proposal to cut and harmonize tariffs on industrial goods between 2005 and 2010 and eliminate them by 2015[6] would reduce the relative attractiveness of FTAs. Moreover, since countries, especially small ones, often face constraints on negotiation resources, pursuit of FTAs could divert scarce resources away from multilateral negotiations.

(iii) **As more countries get into regional arrangements, the cost of nonparticipation mounts**. Consequently, although some countries may prefer the multilateral route, they may gauge that, without similar arrangements, they could be at a competitive disadvantage. In this regard, the characterization of the U.S. strategy by USTR officials as one of "competitive regionalism" whereby countries vie for access to the large U.S. market may indeed be apt. The proposed arrangements with Chile and CAFTA have already sparked a flurry of interest among nonparticipants in the Americas, such as Colombia, in having their own bilateral

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[4] Panagariya (1999) describes a number of studies in which the trade diversion effect accompanying preferential trading arrangements is documented; some evidence also emerges from our simulations below.

[5] As explained in Bhagwati (1971) and elsewhere it is also possible that a trade-diverting customs union can be welfare-improving if there is a large consumption gain: although there is a loss from the terms of trade deterioration implied by shifting imports to the higher-cost partner country, consumers end up consuming at a lower relative price of the importable. In this regard, the (secondary) consumption gain may more than offset the (primary) terms of trade loss from the trade diversion.

[6] See USTR (2002).

agreements with the United States. U.S. activity in the Western Hemisphere is also having repercussions in the Pacific.[7] Arguments have been made that the U.S. approach could catalyze other regions to establish competing, and possibly protectionist, FTAs.[8]

(iv) **A plethora of, sometimes overlapping, trade agreements could add considerable administrative cost and confusion due to the need to negotiate separate agreements, and establish and police various rules of origin and preference margins**. In the case of the SACU, for example, there is a wide variety of trade practices among members and a single U.S./SACU FTA would represent a considerable challenge in terms of harmonizing the various laws and administrative practices within this region (Leith and Whalley, 2003).[9] It also must be emphasized that, while the administrative cost of establishing FTAs could be high, the preference benefit may be actually very short-lived in some cases. Preference margins of participants could be seriously eroded in light of the upcoming liberalization of the global textile market at the beginning of 2005, progress in advancing the Doha Agenda, and as the number of FTAs with the United States grows.

(v) **Reliance on preferential liberalization could potentially increase vulnerability since the preferences could be modified or withdrawn, for political or other reasons.**[10] Even if preferences are not affected by such factors, their effects can change rapidly over time as new FTAs proliferate and margins of preference are eroded. A more stable system would be the multilateral reduction of trade barriers within a set of common rules.

(vi)**The current genre of U.S. FTAs features relatively new elements, such as agreements on labor standards, the environment, intellectual property rights and capital movements.[11] Integration of such elements into trade treaties may risk**

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[7] A Report commissioned by the Australian Department of Foreign Affairs and Trade (CIE, 2001) sums up the situation nicely: "The FTAA will constitute a powerful inducement for U.S. investors to invest in Latin American markets. Australia has a keen interest in ensuring that Latin American countries do not secure an advantage over Australia in access to the U.S. market. Especially given its likelihood of the United States negotiating more FTAs in the future with more of Australia's competitors, an Australian-U.S. FTA constitutes a potentially vital piece of negotiating insurance."

[8] Gordon (2003) considers the strategy a "high-risk" one, which could severely damage U.S. foreign policy and trade if restrictive trade blocs are erected in East Asia and other areas in response. It is noteworthy that, breaking tradition with their long-standing policy of relying on unilateral and multilateral liberalization, Japan, China, and Korea have all recently signed FTAs with trading partners in Asia or are in the process of negotiating FTAs.

[9] More generally, Bhagwati (2002) cautions on the potential "spaghetti bowl" effect of crisscrossing FTAs arising from different transition timetables and differing rules of origin.

[10] Panagariya (2002) uses the examples of the GSP and AGOA to argue that preferential trade schemes not subject to WTO discipline can create damaging uncertainty.

[11] From the perspective of the United States, successful negotiations of such issues at the regional level could give vital leverage for broader acceptance at the multilateral stage.

overburdening the arrangements, especially if nonperformance attracts trade sanctions. For example, in the U.S.-Chile and U.S.-Singapore Agreements, limits and penalties are established on restrictions of capital transfers[12]—in principle, bilateral efforts that proscribe the temporary imposition of capital controls in crisis could undermine the effectiveness of any broader strategy to implement emergency measures. Unless carefully designed and managed, insistence on strict labor, intellectual property and environmental standards could work to restrict trade, especially in countries where institutions are weak.

In general, trade liberalization on a multilateral basis is preferable to regional/bilateral schemes in avoiding trade diversion and the complications accompanying a large amount of overlapping preferential arrangements. Regional agreements may nonetheless provide helpful opportunities to promote trade liberalization, especially when political and other factors impede unilateral or multilateral approaches. The key to ensuring that these arrangements have favorable effects is to strive toward maintaining relatively low external barriers in order to minimize trade diversion. Typically, **regional agreements are likely to offer the greatest benefits, and to entail less diversion, if they have the following characteristics**:[13]

- **They are diverse in regional coverage**. Diversity is associated with greater complementarity of trade patterns, and greater trade with advanced countries may bring advantages to developing countries through increased investment flows and technology transfers.[14] This suggests that the benefits of North-South arrangements may exceed those of South-South arrangements (World Bank, 2000).

- **They are comprehensive in their coverage of products**. FTAs are likely to bear greater fruit if they are extended beyond manufactured trade, and include agricultural products and services.[15] Even more benefits can potentially derive from comprehensive approaches that liberalize foreign direct investment, strengthen competition policy and improve regulatory frameworks. However, the emphasis should be on assisting countries toward these objectives, rather than using the threat of trade sanctions to spur action.

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[12] If the partner's capital transfer restrictions are found to substantially impede outward transfers to U.S. companies, then damages would accrue from the date of initiation of the measure; if the partner imposes any restrictions on any transfers for longer than 12 months, it may be required to compensate investors for the extent and loss of asset value beginning in the second year.

[13] See, for example, Schiff and Winters (2002) for a review of some of these issues.

[14] Olarreaga and others (2003) also illustrate the benefits of North-South trade-related R&D flows on productivity.

[15] While many of the existing FTAs have a comprehensive product coverage, agriculture is often given a longer period of transition or largely excluded from liberalization.

- **FTAs may play an important role in helping lock in broader reform agendas among participating countries.** For example, FTAs appear to have been helpful in encouraging reforms in the area of investment protection and customs administration. At the same time, however, care is needed to ensure that reforms are consistent and appropriate for countries' stage of development.

The U.S. model for bilateral and regional trade arrangements meets many of the criteria for maximizing the potential benefits. For example, as part of the negotiation of the FTAA, timetables are to be established for removal of all trade restrictions on manufactured goods, agriculture and services. Hemisphere-wide rules would be established for intellectual property rights, subsidies, antidumping, countervailing duties, government procurement, investment, competition policy and dispute settlement. Two major challenges remain, however. One is to ensure that these efforts do not undermine the momentum for multilateral liberalization, which would still be the first-best alternative. The other is to tailor these rules to suit the development needs of developing countries involved in a U.S. FTA (such as in the area of capital controls) and avoid using trade remedies as a protectionist instrument.

IV. Simulations of Free Trade Arrangements with the United States

A. The Global Trade Analysis Project (GTAP) Model

The Global Trade Analysis Project (GTAP) model used in this paper is a comparative static, global general equilibrium model based on neo-classical theory. [16] Firms maximize their profits while consumers maximize their utility. All markets are assumed to be perfectly competitive, and constant returns to scale prevail in all production and trading activities. Firms use both a composite of primary factors and a composite of intermediates to produce their output according to Leontief production technology. The primary factor composite is a constant elasticity of substitution (CES) function of labor, capital, land and natural resources, while the intermediate composite is a Leontief function of material inputs, which are in turn CES blends of domestically produced goods and imports. Imports are sourced from all regions, with their share depending on trading prices (the Armington approach).

On the demand side, each country or region is assumed to have a "super" household disposing of regional income in fixed proportions in the form of private consumption, government expenditure and savings. Household consumption is assumed to be a constant difference in elasticities (CDE) function of various consumer goods while government expenditure is based on a CES function of various commodities. Both household and government consumption are CES blends of domestically produced goods and imports, which are in turn sourced from all trading regions based on the Armington approach.

[16] Full documentation of the GTAP model and its companying database can be found in Hertel (1997) and Dimaranan and McDougall (2002). The GTAP model is solved using the software GEMPACK.

In closing the model, regional savings are assumed to be homogenous and contribute to a global pool of savings, which is then allocated among regions for investment in response to changes in regional expected rates of return. These changes are assumed to be equalized across regions, thus giving rise to capital (i.e., savings) mobility across regions. This allows for greater changes in the trade balance as a result of trade liberalization and tends to dampen the terms of trade effects. In contrast to savings, capital stocks are assumed to be immobile across regions, although they are perfectly mobile within a region, as is labor. Land and natural resources are industry-specific, and only limited transformation of their uses among industries is possible. The supply of all factors of production is assumed to be constant, and hence factor prices adjust to clear factor markets.

The simplicity of the GTAP model makes its simulation results relatively easy to interpret, but limits its capacity to deal with more complex economic issues, such as the adjustment path over time and long-term effects of trade policies associated with investment accumulation, technology and productivity change. Also absent in the model are adjustment costs associated with trade liberalization. These limitations must be kept in mind when interpreting the results presented in this paper.

The GTAP database provides data on key trade policies, as well as on other essential data for a large number of countries and commodities.[17] The base year for the data is 1997, and for this reason, some recent preferential arrangements are not incorporated in the database. We have updated the tariff levels in the case of Chile to bring them to the levels just before the signing of the Chile-U.S. FTA. The elasticities used in the simulations are presented in Annex Table 2. Sensitivity tests with respect to these elasticities will be discussed later on.

In the remainder of this section, we present the results of simulations of three free trade arrangements: **United States/Chile, United States/Central America (CAFTA); and United States/Australia.** The simulations involved removing all tariffs on goods as well as bilateral textile and clothing quotas between the partners in the arrangements. The impact on several key economic variables was then analyzed, in particular on welfare, output, terms of trade and trade flows not only of partners but also of excluded countries/regions of interest (See Table 3). The global general equilibrium setting underlying the changes in these variables allowed us to capture some rich and interesting interactions that may not have been evident in a partial equilibrium or single-country analysis. In interpreting the applicability of the results, it is important to recall that dynamic gains are not incorporated in the static GTAP framework, while nongoods provisions of the U.S. FTAs (on services, investment, intellectual property, etc.) could also have meaningful impacts—such factors could be key in determining the overall appeal of the FTAs.

[17] See Annex Table 1 for country/region and commodity/industry groupings used in the analysis.

Table 3. Simulations of Effects of Free Trade Arrangements with the United States

	United States-Chile			United States-CAFTA			United States-Australia		
	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)
Australia	-3.7	0.00	0.00	-36.5	0.00	-0.03	**-1.2**	**-0.03**	**0.18**
Canada	-24.3	0.00	-0.01	-270.0	0.00	-0.11	-50.9	0.00	-0.02
United States	**218.2**	**0.00**	**0.02**	**964.1**	**0.01**	**0.06**	**404.0**	**0.00**	**0.04**
Chile	**4.1**	**-0.07**	**0.31**	-26.8	-0.01	-0.09	-4.1	0.00	-0.02
Mexico	-23.1	0.00	-0.02	-267.7	-0.01	-0.23	-15.1	0.00	-0.02
Argentina	-15.5	0.00	-0.03	-32.0	0.00	-0.06	-4.2	0.00	-0.01
Brazil	-59.8	0.00	-0.03	-123.4	-0.01	-0.07	-15.4	0.00	-0.01
CAFTA	-13.5	-0.01	-0.02	**3,858.9**	**1.49**	**4.63**	-19.9	-0.01	-0.03
Rest of Latin America	-20.9	0.00	-0.02	-231.0	-0.03	-0.22	-11.3	0.00	-0.01
Japan	-31.6	0.00	-0.01	-511.6	0.00	-0.06	-137.9	0.00	-0.02
Rest of Asia	-63.3	0.00	0.00	-1,672.2	-0.03	-0.06	-209.5	0.00	-0.01
Sub-Saharan Africa	-4.4	0.00	0.00	-27.6	0.00	-0.02	-3.4	0.00	0.00
Midde East/North Africa	-13.7	0.00	0.00	-180.4	0.00	-0.04	-22.0	0.00	0.00
European Union	-96.3	0.00	0.00	-990.6	0.00	-0.02	-155.2	0.00	0.00
Rest of the world	-6.6	0.00	0.00	-232.9	0.00	-0.03	-13.5	0.00	0.00
World	-154.4	0.00	0.00	220.2	0.00	-0.03	-259.6	0.00	0.00

Source: Estimates from Global Trade Analysis Project (GTAP) simulations of full bilateral tariff removal in all sectors, and removal of textile and clothing quotas.
1/ Measure of welfare change in US$million.
Note: CAFTA denotes the Central American Free Trade Agreement

B. United States/Chile

The United States is an important trading partner for Chile, purchasing about 19 percent of Chilean exports and providing 20 percent of imports. Chile has a low and mostly uniform MFN tariff of 6 percent, which is waived in a number of cases because of Chilean participation in regional and bilateral arrangements.[18] **Our simulation results show that, if the U.S.-Chile FTA were confined only to goods, then both Chile and the United States would experience small welfare gains** (Table 3).[19] The results also show that aggregate global welfare does not rise as a result of the FTA—given that both the United States and Chile have relatively low protection, there is actually little scope for enhancing global resource allocation from tariff elimination between these two countries.

In terms of trade flows **Chilean exports of processed crops, and to a lesser extent basic crops and textiles and clothing, would receive a boost** (Table 4)**.** Some trade diversion, which explains the smallness of the welfare gain, is evident in the altered structure of Chilean imports as machinery and equipment and basic manufactures from the United States would replace some lower cost imports mainly from the European Union,[20] Japan and the rest of Asia. There is little diversion from Argentina (which provides about 16 percent of Chilean imports) because of the product composition—imports from this source do not compete as much with the United States, unlike the case of Japan, which is a much smaller partner to Chile (4 percent of imports) but whose exports, mainly machinery and equipment, compete with the United States.

Separate simulations were carried out to test the merits of the Chilean strategy of establishing free trade arrangements with its major trading partners, not only in the Americas but with Europe (and later Asian countries) in reducing potential trade diversion as their products would eventually be entering the Chilean market on the same terms. The results show that having the Chile-U.S. FTA implemented at the same time as the Chile-EU FTA would significantly reduce the trade diversion effect on welfare. A Chile-Japan FTA implemented at the same time would bring an additional welfare gain.[21]

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[18] Chile already has separate agreements with Canada (1997) and Mexico (1998) and with Central America (2001), along with comprehensive market opening agreements with Bolivia, Venezuela, Colombia, Ecuador and Peru. Chile joined MERCOSUR (the South American Common Market, which includes Argentina, Brazil, Paraguay, and Uruguay) as an associate member in 1996. An FTA with the European Union was signed in 2002. Free trade arrangements with Japan, Singapore, and South Korea, are also reportedly under discussion.

[19] In terms of GDP, there is a small reduction for Chile while the United States is no worse off.

[20] These results may overestimate the extent of trade diversion since the 1997 GTAP database does not include Chile's trade agreement with the EU.

[21] These results (details available on request) lend support to the "additive regionalism" strategy (see also Harrison, Rutherford, and Tarr, 2002)

Table 4. Effects of Free Trade Arrangements with the United States on Trade Flows 1/

United States-Chile (US$m)

	Chilean exports		Chilean Imports												
	USA	Total	AUS	CAN	USA	MEX	ARG	BRA	CAFTA	LTN	JPN	ASIA	EU	ROW	Total
Crops	194	81	0	1	37	0	3	0	0	2	0	0	0	0	44
Livestock	0	-5	0	0	3	0	0	0	0	0	0	0	0	0	2
Other primary agriculture	-4	-25	0	0	1	0	0	0	0	0	0	0	0	0	1
Processed animal prods.	6	-3	0	0	6	0	7	0	0	2	0	1	1	0	17
Processed crop prods.	574	436	0	0	59	0	-1	0	-1	-1	0	0	-1	0	53
Minerals	1	6	-3	-2	40	0	-18	0	0	-8	0	-2	0	-10	-3
Textiles & clothing	206	204	0	0	133	-4	-3	-2	0	-4	0	-31	-9	-1	79
Basic manufactures	151	122	-3	-8	850	-43	-49	-54	-7	-44	-15	-84	-152	-28	362
Machinery & equipment	5	30	-8	-30	1,964	-148	-34	-166	-1	-7	-271	-300	-603	-53	342
Services	-12	-82	1	1	8	0	0	0	0	0	2	6	17	5	42
Total	1,121	765	-13	-38	3,101	-195	-96	-222	-9	-60	-284	-410	-749	-86	940

United States-CAFTA (US$m)

	CAFTA exports		CAFTA Imports												
	USA	Total	CAN	USA	CHL	MEX	ARG	BRA	CAFTA	LTN	JPN	ASIA	EU	ROW	Total
Crops	1,515	195	10	1,252	1	8	7	2	-50	8	0	9	14	2	1,262
Livestock	-2	-36	0	115	0	0	0	0	-12	-1	0	-1	-1	0	99
Other primary agriculture	-65	-151	0	47	0	1	0	0	-5	1	0	2	1	1	49
Processed animal prods.	82	-49	-10	978	-1	-5	-29	-5	-86	-1	0	-30	-76	-10	726
Processed crop prods.	6,253	5,034	-17	2,566	-11	-29	-4	-7	-285	-35	-2	-12	-152	-12	1,999
Minerals	66	66	-5	6	0	-105	-1	-7	-4	-355	0	-1	-3	-145	-620
Textiles & clothing	14,274	13,951	-10	8,068	-3	-123	-1	-13	-201	-50	-14	-1,155	-151	-39	6,309
Basic manufactures	182	-2,119	-40	5,274	-9	-177	-9	-34	-1,111	-177	-26	-153	-449	-120	2,969
Machinery & equipment	-47	-1,036	-46	6,608	-2	-116	-5	-89	-197	-15	-1,652	-591	-638	-128	3,130
Services	-826	-4,347	49	1,074	4	20	9	23	-10	17	157	271	649	219	2,482
Total	21,431	11,508	-69	25,988	-19	-526	-34	-130	-1,960	-608	-1,537	-1,661	-806	-233	18,405

United States-Australia (US$m)

	Australian exports		Australian imports												
	USA	Total	CAN	USA	CHL	MEX	ARG	BRA	CAFTA	LTN	JPN	ASIA	EU	ROW	Total
Crops	65	-159	0	21	0	0	0	1	0	0	0	5	1	3	31
Livestock	1	-64	0	2	0	0	0	0	0	0	0	2	0	0	5
Other primary agriculture	111	7	0	0	0	0	0	0	0	0	0	1	0	0	2
Processed animal prods.	430	293	0	13	0	0	0	0	0	0	0	4	3	1	21
Processed crop prods.	1,443	1,368	-1	178	-1	0	0	-1	-1	-1	-1	-27	-21	-4	120
Minerals	14	9	0	0	0	0	0	0	0	0	0	-8	0	-11	-20
Textiles & clothing	425	431	-2	748	0	-1	0	-1	0	-1	-9	-292	-54	-29	358
Basic manufactures	191	-5	-12	1,259	-1	-2	-1	-6	0	-1	-55	-247	-230	-58	646
Machinery & equipment	364	322	-28	2,999	0	-3	0	-5	0	0	-549	-601	-680	-63	1,069
Services	-70	-341	3	37	0	2	0	1	1	1	11	21	55	17	150
Total	2,974	1,860	-41	5,257	-2	-5	-1	-11	0	0	-604	-1,144	-926	-143	2,382

1/ Global Trade Analysis Project (GTAP) simulations of full bilateral liberalization of all sectors, including removal of textile and clothing quotas. CAFTA denotes Central American Free Trade Agreement. Abbreviations: AUS: Australia; CAN: Canada; USA: United States; CHL: Chile; MEX: Mexico; ARG: Argentina; BRA: Brazil; LTN: rest of Latin America; JPN: Japan; ASIA: rest of Asia; EU: European Union; ROW: rest of world.

It should be noted, however, that establishing an FTA with every trading partner is not the same as multilateral liberalization. There are additional costs associated with rules of origin with each FTA. However, the benefits of preferences that this country enjoys from FTAs can outweigh the costs of implementing rules of origin and reduce Chile's incentives to join multilateral liberalization. **Additional simulations indicate that for Chile, FTAs with the United States, EU, and Japan would generate a welfare gain considerably larger than the gain from full multilateral liberalization,** because Chile would enjoy preferential access to these markets at the expense of other competitors.

C. United States/Central America

The United States is a key outlet for Central American exports and many products already enter under preferential arrangements such as the GSP and CBI, but barriers are higher in textile products and agriculture. Our basic simulations indicate **an important welfare gain for Central American countries as a whole, with GDP increasing by as much as 1.5 percent; the result for the United States is also positive but much smaller, while global welfare also increases. A main source of the gain for CAFTA is from expanded sales of textiles and clothing and processed crops,** which more than offset trade diversion from Japan, the rest of Asia and Europe in machinery and equipment.[22] Some trade creation is also evident as basic manufactured imports from the United States supplant higher cost CAFTA production—consequently, intra-CAFTA (duty-free) trade in these products declines. Not surprisingly, an agreement between the United States and CAFTA has a greater impact on the rest of Latin America than a U.S.-Chile FTA. Every country outside the U.S.-CAFTA FTA loses.

The findings clearly support the notion that an agreement between the United States and CAFTA would help to integrate the textile and clothing facilities in Central America and lead to an expansion in such trade.[23] At the same time, **the planned global liberalization of textile and clothing quotas at the beginning of 2005 under the Agreement on Textiles and Clothing underlines the danger in relying on preferential arrangements in this sector as a source of dynamic growth.**[24] Given the importance of this sector for Central America, we conducted a modified simulation involving the global removal of quotas in textiles and clothing *alongside* the U.S.-CAFTA agreement. The results show that, while indeed the welfare gain to CAFTA would be markedly lower, it would still be positive,

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[22] On the face of it, the order of magnitude of the increase in exports in the simulations appears high—CAFTA total exports increase by about 50 percent (of 2002 exports). However, it should be noted that Mexico's exports had doubled just three years after NAFTA, with most of this increase destined to the United States

[23] See for example, Press Conference of USTR Robert Zoellick following his meeting with Central American Presidents, April 10, 2003.

[24] Likewise, implementation of the FTAA in 2005 would also shorten the preferences of CAFTA members in the United States relative to other Western Hemisphere countries.

driven more in this case by the boost to processed crops. [25] The expansion of Central America's textiles and clothing exports to the U.S. markets is cut by more than half, to US$6.8 billion.

D. United States/Australia

Australia's applied MFN tariffs average 4.3 percent currently, although tariffs on textile items are closer to 15 percent, and its trade is centered around the 21-member Asia Pacific Economic Cooperation (APEC) Forum. APEC is committed to the attainment of free and open trade and investment in the Asia-Pacific region no later than 2010 in the case of industrialized economies and 2020 in the case of developing countries.[26] Australia has been progressively reducing its external tariffs, but has given increased emphasis to developing bilateral trade relations with Japan, Korea, Singapore, Thailand, and the United States. About one-tenth of Australia's exports go to the United States, while one-fifth of imports originate in the United States.

In the context of fairly low existing tariffs, the simulations point to relatively small overall welfare and output effects of an Australia-U.S. agreement on the partners. The slightly negative impacts on Australia are related to trade diversion from Japan, Asia, and the European Union in machinery and equipment, basic manufactured products and textiles. The overall global impact is also found to be small, but negative. Notwithstanding the limited economy-wide impact in Australia, producers of processed crops and processed animal products (meat and dairy products) in that country could stand to gain significant new export markets. In addition, **the United States is Australia's largest partner in services and investment, and while they are not treated in the simulation exercise, these areas could possibly receive a stimulus from an Australia-U.S. FTA** (see, for example, APEC (2001) discussed below).

E. The Role of Agriculture

In practice, virtually all FTAs have a phased approach towards liberalization and, in many cases, agriculture is given a fairly extended transition period. In the Chile-U.S. agreement, for example, there is a 12-year transition period for certain agricultural products. Table 5 summarizes the results of modifications of the earlier simulations to exclude agricultural liberalization. In comparing these to Table 3, **it is striking that welfare for U.S. FTA partners is always smaller when agriculture is not covered**—Chile could suffer a welfare loss, the benefit of a U.S.-CAFTA could be significantly reduced, and a negligible welfare

[25] The welfare is reduced to $2.2 billion (42 percent lower than without global liberalization of textiles and clothing) and the GDP increase is now 1.1 percent (compared to 1.5 percent without global liberalization). Meanwhile the growth in total CAFTA exports is about 20 percent lower. Detailed results available on request.

[26] APEC accounted for 72 percent of Australia's merchandise exports in 2001. Australia also has a long-standing free trade agreement (the Closer Economic Relations Agreement) with New Zealand and a trade agreement with Canada which allows for bilateral preferential market access.

loss for Australia could turn into a significant one. On the other hand, the impact on the United States is rather limited. At the global level, the exclusion of agriculture from the three FTAs now make all of them welfare reducing—even for U.S.-CAFTA.

F. Sensitivity Tests

While a number of assumptions in the model are important in driving the simulation results presented above, the elasticities of substitution in demand[27] play a central role. To a large extent, these elasticities determine the terms of trade effects, which in turn influence the welfare results. **To test how sensitive our results are to these elasticities, we repeated our simulations with two alternative sets of elasticities. We first halve the values of the elasticities and then double them**.

The exercise shows that our results presented earlier are robust (Table 6). While there are some expected changes in the magnitude of welfare results, in only one case has the result changed sign: in the lower elasticity case, Australia would gain marginally from an FTA with U.S. rather than lose slightly. It is generally true that as the values of elasticities increase, the impact of the FTAs becomes larger, especially with respect to the negative effects on third countries, whose exports to FTA countries are replaced with greater ease.

G. Results of Other Studies

The most recent work reviewed was published by the **United States International Trade Commission in June 2003 and addressed the impact of the U.S.-Chile Agreement on the U.S. economy. It concluded that the FTA's most important benefits were related not to reciprocal tariff elimination but to nontariff provisions.** It estimated the effects on U.S. welfare and trade of tariff reductions alone to range from negligible to very small given the open trade relationship and Chile's small economy compared to the United States. At the sectoral level, impacts would likely be greater for activities with high initial trade barriers—for U.S. exports, transportation equipment, textiles, apparel and leather products, coal, oil, and gas, and for U.S. imports, dairy products, textiles, apparel and leather products, and other crops. Using a more qualitative approach, the report suggested that since the United States and Chile already have high standards for the treatment of foreign investors, the FTA was unlikely to have significant additional effects on investor confidence and bilateral investment flows.

Brown, Deardorff, and Stern (2001) used the Michigan Model of World Production and Trade to simulate the effects of a variety of regional/bilateral free trade agreements involving the United States and Japan. They found that regional agreements would increase global and member country welfare but much less so than a new WTO

[27] There are two sets of these: elasticities of substitution between domestic goods and imports and elasticities of substitution among sources of imports by country of origin (see Table A.2).

Table 5. Effects of Free Trade Arrangements with the United States, Excluding Agriculture 1/

	United States-Chile			United States-CAFTA			United States-Australia		
	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)	Equivalent Variation 1/ (US$m)	GDP (% ch)	Terms of Trade (% ch)
Australia	-4.0	0.00	0.00	-22.9	0.00	-0.02	**-155.6**	**-0.03**	**-0.06**
Canada	-17.5	0.00	-0.01	-159.8	0.00	-0.07	-28.3	0.00	-0.01
United States	**289.2**	**0.00**	**0.03**	**787.7**	**0.00**	**0.08**	**456.4**	**0.00**	**0.04**
Chile	**-104.2**	**-0.08**	**-0.15**	-5.3	0.00	-0.01	-1.5	0.00	0.00
Mexico	-18.3	0.00	-0.02	-235.0	-0.01	-0.19	-11.7	0.00	-0.02
Argentina	-13.3	0.00	-0.03	-6.8	0.00	0.00	-1.9	0.00	0.00
Brazil	-51.8	0.00	-0.03	-74.3	0.00	-0.04	-9.8	0.00	-0.01
CAFTA	-6.2	0.00	-0.01	**2,702.4**	**1.08**	**3.31**	-7.8	0.00	-0.01
Rest of Latin America	-8.8	0.00	-0.01	-148.8	-0.02	-0.14	-4.7	0.00	0.00
Japan	-23.5	0.00	0.00	-473.8	0.00	-0.06	-79.4	0.00	-0.01
Rest of Asia	-49.6	0.00	0.00	-1,737.4	-0.03	-0.06	-149.3	0.00	-0.01
Sub-Saharan Africa	-4.1	0.00	0.00	-16.5	0.00	-0.02	-2.0	0.00	0.00
Midde East/North Africa	-13.7	0.00	0.00	-192.6	-0.01	-0.04	-19.1	0.00	0.00
European Union	-75.3	0.00	0.00	-739.1	0.00	-0.01	-132.2	0.00	0.00
Rest of the world	-7.0	0.00	0.00	-193.8	0.00	-0.03	-12.6	0.00	0.00
World	-108.0	0.00	0.00	-516.0	0.00	0.00	-159.6	0.00	0.00

Source: Estimates from Global Trade Analysis Project (GTAP) simulations of full bilateral tariff removal in all sectors except agriculture, and removal of textile and clothing quotas.

Note: CAFTA denotes the Central American Free Trade Agreement.

1/ Measure of welfare change in US$million.

Table 6. Welfare Effects of U.S. Bilateral Free Trade Agreements Under Different Elasticities of Substitution 1/ 2/

	U.S.-Chile FTA			U.S.-CAFTA FTA			U.S.-Australia FTA		
	Lower elasticities	Central elasticities	Higher elasticties	Lower elasticities	Central elasticities	Higher elasticties	Lower elasticities	Central elasticities	Higher elasticties
Australia	-4	-4	-4	-39	-36	-42	**81**	**-1**	**-129**
Canada	-27	-24	-27	-269	-270	-301	-54	-51	-67
United States	**243**	**218**	**118**	**1,053**	**964**	**535**	**418**	**404**	**300**
Chile	**31**	**4**	**58**	-22	-27	-30	-3	-4	-7
Mexico	-25	-23	-31	-238	-268	-326	-19	-15	-19
Argentina	-15	-15	-24	-32	-32	-39	-4	-4	-7
Brazil	-50	-60	-91	-116	-123	-172	-14	-15	-31
CAFTA	-12	-14	-30	**3,018**	**3859**	**7562**	-15	-20	-50
Rest of Latin America	-17	-21	-39	-177	-231	-348	-8	-11	-29
Japan	-34	-32	-42	-493	-512	-672	-115	-138	-292
Rest of Asia	-50	-63	-196	-1,091	-1672	-2844	-165	-210	-405
Sub-Saharan Africa	-4	-4	-6	-21	-28	-46	-2	-3	-7
Midde East/North Africa	-9	-14	-25	-164	-180	-276	-16	-22	-40
European Union	-97	-96	-117	-1,040	-991	-1041	-165	-155	-201
Rest of the world	-4	-7	-16	-210	-233	-317	-13	-14	-27
World	-74	-154	-471	160	220	1645	-97	-260	-1011

Source: Simulations of the Global Trade Analysis Project (GTAP) model.

1/ These are elaticities of substitution between domestic goods and imports and those between sources of imports by country of origin.

2/ See Annex Table A.2 for central elasticities of substitution. In this table the lower (higher) elasticities are half (double) the values of the central elasiticities.

Note: CAFTA denotes the Central American Free Trade Agreement.

multilateral trade round. At the same time, there would be detrimental welfare effects on some nonmember countries. In simulating the accession of Chile to NAFTA, the authors found that the welfare of NAFTA members rose, while there was evidence of trade diversion from other Latin American countries. For a U.S.-Chile FTA, Chilean GDP would increase by 0.37 percent.[28]

Using a multi-country computable general equilibrium model, **Harrison, Rutherford and Tarr (2002) estimated that the strategy of "additive regionalism"—negotiating bilateral FTAs with all of its significant trading partners—was likely to provide Chile with gains that are many multiples of the static welfare gains from unilateral free trade**.[29] They also estimated that all member countries gained from the FTAA except Mexico, due to loss of preferential access to the U.S. market. Central America reaped enormous gains, because of enhanced market access and increased competition from a large region in its domestic markets. Excluded regions, notably the EU, always lost from any of the preferential arrangements considered.

Two reports prepared for the Australian Department of Foreign Affairs and Trade came to very positive conclusions about a U.S.-Australia FTA. The first study (CIE, 2001) used both a dynamic model as well as the GTAP framework. In the dynamic analysis, Australian welfare could be nearly 0.3 percent and U.S. welfare 0.016 percent above what they otherwise might have been. Overall, world exports rose showing that trade creation was greater than trade diversion. Using GTAP, the largest gains were in sectors with the highest initial trade barriers—for Australia in sugar and dairy and for the United States in manufacturing—motor vehicles and parts and of metal products. For all excluded countries, the effects on real GDP were barely noticeable, although there was clear evidence of trade diversion. The second report (Australian APEC Study Center, 2001) was broader in scope and examined not only trade but investment and its wider implications. It stressed that, in addition to the direct impacts of removing bilateral trade barriers, an FTA would have dynamic benefits, linking Australia's economy to the world's biggest and most competitive and innovative economy. It anticipated a boost to U.S. investment in Australia and significant spillovers on technology, business and management culture.

V. Summary and Conclusion

A distinguishing component of current U.S. trade policy is the emphasis on establishing FTAs with partners spanning the globe from the Americas through Africa, the Middle East, and the Pacific. For the United States, enhancing merchandise exports is often not the

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[28] Similar results were found in an earlier study (Brown, Deardorff, and Stern, 2000).

[29] They noted that this strategy, combined with Chile's policy of lowering its external tariff, would help to minimize trade diversion costs. In a less formal analysis, Schiff (2002) concluded that Chile was likely to obtain static and dynamic benefits from an FTA with the United States, and endorsed the strategy of negotiating FTAs with the EU and Asian countries.

dominant consideration, as expanding trade in services, protection of intellectual property rights, and geopolitical and security concerns also enter the equation. Similarly, for its partners, the potential for attracting direct foreign investment and technology transfer from the United States is generally a major driving force behind the FTAs. As the process unfolds, care must be taken to deal with several possible risk factors, such as (i) the welfare costs of trade diversion; (ii) diluting the momentum toward multilateral trade liberalization; (iii) the rising cost of nonparticipation; (iv) high administrative costs and confusion in overlapping arrangements; (v) vulnerabilities related to reliance on preferential access compared with a set of established multilateral rules; and (vi) overburdening trade arrangements with new elements, such as labor standards, the environment, intellectual property rights, and restrictions on capital movements.

Stylized simulations of stand-alone FTAs with the United States, involving complete free trade in goods, highlight several of these issues. For the United States, the gain from each agreement is small, although nonnegative since, with its large size and diversified trade structure, trade diversion is quite limited. For the partners of the United States, their exports rise in industries where they have comparative advantages, but this gain must be balanced against the possible diversion of imports from lower-cost sources. In general, welfare losses are experienced by nonmembers of the new FTAs, which see their trade contract—this includes countries like Mexico and Canada which have prior FTAs with the United States. These results are broadly consistent with other, similar studies.

Three important implications emerge from this analysis. First, initial improvements in market access enjoyed by participants in FTAs with the United States could be progressively eroded and subsequently increase adjustment costs, because of several factors—many of the FTAs are coming together over a short period; major global quota reductions in textiles and garments are scheduled over the next couple of years; and the current round of multilateral trade negotiations may result in lower most-favored-nation barriers. Second, facing this prospect of preference erosion, countries would have reduced incentives to participate in multilateral liberalization. For a small country, benefits from an FTA with major markets can be larger than those from multilateral liberalization, even though the former are obtained at the expense of third countries. And, finally, welfare benefits to FTA participants could be substantially reduced if sensitive sectors, such as agriculture, are excluded from bilateral liberalization. Where there is insufficient complementarity in trade structure between FTA partners, such exclusion could ultimately result in overall welfare losses.

ANNEX I. TABLES

Table A1. Countries/Regions and Commodities Industries in the Model

Country/Region	Commodity/Industry
Australia	Crops
Canada	Livestock
United States	Other agricultural (primary)
Chile	Processed animal products
Mexico	Processed crop products
Argentina	Minerals
Brazil	Textiles and clothing
Central America	Basic manufactures
Rest of Latin America	Machinery and equipment
Japan	Services
Rest of Asia	
Sub-Saharan Africa	
Middle East and North Africa	
European Union	
Rest of the world	

Table A2: Central Scenario: Elasticities of Substitution

Industry	Between Domestic Goods and Imports	Between Sources of Imports by Country of Origin
Crops	4.4	8.8
Livestock	5.2	11.2
Other agricultural (primary)	5.6	11.0
Processed animal products	4.4	8.8
Processed crop products	5.0	9.8
Minerals	5.6	11.2
Textiles and clothing	6.2	12.6
Basic manufactures	4.8	9.6
Machinery and equipment	7.2	13.8
Services	3.8	7.6

Source: Based on Global Trade Analysis Project (GTAP) database 5.

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