This report has identified both benefits and obstacles to a Swiss-US FTA. Our central message is that an agreement can be highly worthwhile for both parties. But it requires a strong commitment to surmount entrenched interests. The size of potential benefits is directly related to the capacity of each government to open new frontiers of trade and investment liberalization. To achieve a noteworthy outcome, policy officials not only need to make path-breaking concessions at the negotiating table, they also need to build persuasive coalitions for liberalization at home.\(^1\)

US Trade Promotion Authority (TPA) expires in June 2007, and without that authority it would be almost impossible for the United States to negotiate and ratify a free trade pact with Switzerland. For the United States, as for Switzerland and most other countries, the big trade event over the next 18 months is completion of the WTO Doha Development Round. In practical terms, that means the Swiss-US FTA must be agreed by late 2006, so that it can be brought to the Congress either shortly before, or as a companion to, the Doha Round package. The contentious debate over ratification of the CAFTA-DR agreement will not be repeated with Switzerland – none of the labor or environmental

\(^1\) We use the term “concession” in the time-honored sense of mercantilism. In this sense, nearly all trade and investment concessions benefit the country that makes them.
issues that featured so prominently will be present – but difficult commercial issues may attract the opposition of some Congressmen and Senators.

On the Swiss side, two aspects will attract considerable political notice and very likely spark a referendum. One of those is the liberalization of agriculture, even if phased in over the working life of today’s farmers. The other is the precedent of a stand-alone agreement with the United States, outside the EFTA framework, and as a counterpart to Switzerland’s strong economic ties to the European Union. Swiss leaders will need to persuade the population that the benefits of an FTA, especially the spur to investment and growth, justify a departure from traditional ways of managing a prosperous but lethargic economy.

A. Strong Links, Similar Values, Large Benefits

The United States is Switzerland’s most important economic partner after the European Union. On a number of political economy criteria (summarized in Chapter 1) Switzerland ranks near or at the top of partners under consideration by the United States for new FTA pacts. To be sure, on national security grounds, Switzerland ranks low in the US queue, like most non-Muslim countries. However, as the US-Chile, US-Singapore, and CAFTA-DR agreements attest, national security is not the only touchstone for launching or concluding US free trade agreements. Commercial relations between Switzerland and the United States rest firmly on large investment holdings, substantial two-way flows of business services, and significant bilateral merchandise
As leading advocates of market capitalism, Switzerland and the United States are well situated to conclude an FTA that breaks new ground in dismantling barriers.

Calculations based on gravity and computable general equilibrium (CGE) models, reported in Chapter 8, suggest that a Swiss-US FTA could augment bilateral merchandise trade flows by between 20 percent (CGE model) and 100 percent (gravity model). The CGE model calculates a very modest increase in two-way services trade (about 12 percent), but this figure probably reflects limitations in modeling services trade and estimating the height of barriers. Gravity models of foreign direct investment (FDI), surveyed in Chapter 7, suggest that a free trade area might increase the stock of FDI in Switzerland by some 40 percent, giving a strong push to Swiss technology, as well as trade in services and manufactured goods.

The CGE framework reported in Chapter 8 calculates that the projected increase in two-way trade would lead to negligible changes in US and Swiss GDP levels. We are skeptical of this result for Switzerland, because the modeling framework does not reflect several benefits: the adoption of improved technology in the wake of more intense competition, the exit of less efficient firms, and greater scale and network economies. Based on alternative methodologies, summarized in Chapter 8, the annual GDP gains to each partner from expanded trade could be on the order of $1.1 billion. For Switzerland, this amounts to a permanent gain of about 0.5 percent of GDP. An expansion of the inward FDI stock, perhaps by 40 percent, would add significantly to this figure.

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2 Two-way FDI and portfolio investment levels, as well as two-way merchandise trade flows, are well above the norm predicted by gravity models of trade and investment.
Other benefits, hard to model but no less important, could flow from a forward-looking
Swiss-US FTA. The pact might push the agricultural reform agenda, both in the
European Union and the United States. And it might influence, in a positive way, the
multilateral agenda for liberalizing trade in services, government procurement, and other
topics.

B. Answering the Skeptics

The FTA undertaking, if launched, will require reasoned responses to skeptical questions.
In Chapters 1 and 9, we addressed three systemic concerns that might be raised. The first
concern is that a bilateral FTA might impede progress on the WTO Doha Round. In our
view, this argument invokes a false dichotomy. Swiss-US FTA negotiations should not
drain the resources of the US Trade Representative’s office. A Swiss-US FTA should
fully comply with the requirement of GATT Article 24 that barriers be eliminated on
“substantially all the [merchandise] trade [between the partners]”. To be sure, we have
recommended 20-year phase-outs for barriers on sensitive agricultural products, twice as
long as the norm agreed in the WTO’s 1994 Understanding on the Interpretation of
Article 24. In light of the practice already established in multiple FTAs, we believe a fair
review would conclude the standards of Article 24 are met, if these long phase-outs are
accompanied by our WTO-plus recommendations in other areas.

Nonetheless, we recommend that Switzerland and the United States should invite the
Director General of the WTO to appoint an independent group of experts to critique the
agreement for its consistency with the text and spirit of Article 24. This independent
review would be additional to the customary Article 24 reviews by government
representatives, which in virtually all cases – including past FTAs entered into by the
United States and EFTA -- have led to inconclusive findings. The independent review
should not only critique the new FTA, but also suggest appropriate remedies, or even
compensation to other WTO members, to the extent the agreement falls short.

In some areas, the Swiss-US FTA could set a benchmark for WTO agreements in the
Doha Round and subsequent multilateral agreements, and go beyond the minimal
requirements of Article 24. Topics for path-breaking provisions include elimination of
barriers to services trade (including movement of skilled personnel), new rules on
geographic indications and government procurement, very liberal rules of origin.

A second systemic concern is that a Swiss-FTA would simply add to the “spaghetti bowl”
of preferential trade agreements – numbering some 300 concluded and proposed -- that
critics claim are eroding the multilateral trading system. If equivalent liberalization could
have been achieved by the GATT/WTO system as has been achieved by the “strong”
bilateral and regional agreements, the FTA process would be rightly deplored. But the
post-war history of trade negotiations does not suggest that equivalent liberalization was
remotely possible. A worthwhile Swiss-US FTA will go far beyond the achievements of
the Doha Round, and could in fact set a model for diminishing the “spaghetti bowl”

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3 See the Sutherland Report (2004) for an acid critique of the banal nature of past Article
24 reviews.
4 This figure is cited in the Sutherland Report (2004).
problem through liberal rules of origin. Moreover, most of the trade diversion resulting from a Swiss-US FTA can in fact be categorized as “preference dilution”, since the new agreement would create a more nearly level playing field between existing partners (notably the EU and NAFTA members) and the new partner (the United States or Switzerland).

A third systemic concern – one which seems to be fading from the public debate – goes to the formation of “hub-and-spoke” systems and super-regional trading blocs with political as well as economic dimensions. Obviously a Swiss-US FTA would do nothing to consolidate super-regional blocs in Europe or the Western Hemisphere. Quite the opposite. By the same token, as spelled out in Chapter 9, a Swiss-US FTA has the character of a “reverse-hub-and-spoke” agreement that would alleviate the commercial disadvantages that confront a small “spoke” country (in this case Switzerland).

C. Managing Agriculture

Agriculture is by far the toughest area, both from the standpoint of negotiations and adjustment. Chapters 2 and 3 showed that difficult issues spring not only from the extremely high tariffs and strict tariff-rate quotas, but also from certain sanitary and phyto-sanitary measures and different ideas about the protection of geographical

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5 A more general observation can be made: since many FTAs are already in existence, each new FTA that has a major country as one partner is likely to level the playing field in a way that adds to global economic efficiency. As a major country’s network of FTAs expands, the list of “outsiders” grows shorter and shorter, and so does the prospect of harmful trade diversion when an additional country is added to the FTA roster.
indications. The combined result of various barriers is that agricultural trade between the United States and Switzerland remains well below potential.

The gravity and computable general equilibrium models reported in Chapter 8 suggest that the complete elimination of agricultural barriers would more than double two-way trade, increasing each partner’s exports by more than a billion dollars annually. In previous negotiations, through EFTA or on its own, Switzerland has liberalized agricultural trade to a very limited extent, using a “positive list” approach. This would not be an acceptable *modus operandi* for a Swiss-US FTA. However, as Chapter 2 pointed out, prior US free trade agreements have always allowed for long phase-out periods, a very limited number of exceptions through the use of TRQs and special safeguards on the path to eventual elimination of agricultural barriers. For instance, in the FTA with Morocco, for at least 4 product categories there are (small) TRQs and no phase-out periods. The same is true for the CAFTA-DR pact with respect to sugar imports by the United States.

Sanitary and phyto-sanitary (SPS) standards are closely related to agricultural trade. While ostensibly designed to ensure animal and human health, at times SPS measures can amount to non-tariff barriers. Some issues are best left to the WTO, but others can be addressed in the Swiss-US FTA. Chapter 3 recommended that the United States and Switzerland incorporate the best elements of their respective SPS agreements with Australia and the European Union in the Swiss-US FTA. Importantly, Switzerland and
the United States should create a standing group of senior government officials to promote the convergence of SPS standards and, where possible, to resolve current and future disagreements.

Chapter 3 also examined the protection given by the United States and Switzerland to “branding” through geographic indications (GIs). Like the United States, Switzerland applies a strong regime of intellectual property protection, but Swiss authorities believe that the current US system does not adequately protect holders of GI rights. A forward-looking agreement should endorse “state of the art protection” -- to borrow Ambassador Zoellick’s expression -- for all forms of intellectual property, including GIs. The United States should certify appropriate Swiss agricultural goods as “distinctive products”, and should support Switzerland’s position in WTO talks.

Finally, and critically important to enlist domestic support, the Swiss-US FTA should contain special safeguard provisions for agriculture, and be accompanied by meaningful adjustment programs for adversely affected workers, firms and communities. Robust assistance will be necessary to manage the transition from extreme protection to freer trade, especially in beef, pork, dairy products, cereals, oilseeds and sugar.

D. Expanding Trade in Manufactures

More than 95 percent of merchandise trade between the United States and Switzerland involves manufactured products. While the vast majority of manufactures trade enters free or pays only nuisance tariffs, the remaining high tariffs catalogued in Chapter 4 still
restrict trade in a number of products. Moreover, the elimination of even nuisance tariffs can spark commerce: industrial firms can then rationalize production and invest in new facilities with no fear of trade barriers.

The gravity model reported in Chapter 8 suggests that a Swiss-US FTA could more than double two-way manufactures trade; the CGE model suggests an expansion of about 20 percent. Market access negotiations for manufactured products should be smooth, and most tariffs should be eliminated immediately. For the most sensitive products, longer phase-outs will be necessary. The Swiss-US FTA could further contribute to seamless global production by adopting liberal rules of origin (especially with respect to cumulation and certification), by giving greater scope for mutual recognition of standards, and by permitting more self-assessment.

E. Services: The Future of International Trade

Both the United States and Switzerland recognize the crucial role of services as a source of sustained competitiveness and export expansion. Barriers remain, but both countries have affirmed their intention to further liberalize their service sectors. Chapter 5 documents the barriers that affect financial services, network industries, the audiovisual sector, and professional personnel. In its FTAs with Singapore and Australia, the United States negotiated “WTO plus” provisions that could be readily adopted in the Swiss-US FTA. But the Swiss agreement should go further and set a higher standard. For example, it should extend unconditional MFN rights with respect to services, advance the
process of mutual recognition of educational and professional credentials, and extend national treatment to responsible insurance firms based in each country.

F. Government Procurement

Opening government procurement in Switzerland and the United States would improve the efficiency of public spending and set a useful precedent for WTO negotiations. The WTO Government Procurement Agreement (GPA), signed by both countries, does not cover all federal procurement in either nation. Moreover, Switzerland reserved its application of the GPA to US firms in important sectors, arguing that the United States had not given equivalent access to Swiss firms. The Swiss-US FTA provides a new opportunity for reciprocal extension of GPA benefits to firms in both countries. In addition, both countries should extend their federal procurement coverage to offer the best terms negotiated in prior FTAs, and to provide enhanced access for research and development, and transportation and utility services.

Further, the FTA should include initiatives to open more US states to procurement from Swiss firms (to the same extent Swiss cantons are already open to US firms, as explained in Chapter 6). Thus, the United States should seek to cover two or three “holdout” states (in addition to states that have previously agreed to GPA or FTA procurement provisions).6

6 As an aside, the CGE model reported in Chapter 8 does not attempt to reflect barriers on government procurement. Meaningful liberalization of these highly protected purchases could make a significant addition to the calculated trade and welfare gains.
G. Investment

Investment provides the bedrock for Swiss-US commercial relations. Moreover, the synergy between direct investment and trade is now widely recognized. Most of the literature endorses the idea that addressing the remaining frictions in the investment relation could foster Swiss-US two-way trade.

On every investment question of global importance, Swiss and US policies are closely aligned. Still, a Swiss-US FTA would improve the investment environment. Both governments need to further liberalize sectors dominated by public monopolies, relax impediments to foreign ownership in selected sectors, allow easier access to temporary employees, and review conditions for licensing professional personnel. The FTA should proclaim the rights of private investors with respect to national treatment, and should ensure appropriate compensation in the event of public taking of private property. Finally, the FTA should establish arbitration procedures for resolving disputes between private investors and host states, including an appellate body to ensure the consistent application of legal principles.

H. Swiss-EU Relations

Our penultimate chapter explored the implications of a Swiss-US FTA on Swiss-EU economic relations. Brussels will surely take notice of a US agreement with Switzerland – the first US FTA with a European country – but there are reasons to believe that the pact would not damage relations between Bern and Brussels. From a purely commercial point of view, EU producers have already obtained almost unfettered access to the Swiss
market – apart from agriculture. Brussels has historically respected the Swiss tradition of operating on a different and somewhat independent commercial track. Very likely, as Chapter 9 suggests, the European Union will come to view the Swiss-US FTA in the same benign light that the United States views the EU-Mexico FTA.

I. Wrapping Up

Our bottom line is that a Swiss-US FTA makes very good sense, if negotiated as an agreement that pushes the frontier of liberalization. The agreement can serve as a wedge to point both America and Europe in a different, and less distortive, direction for agriculture – preserving the scenic and cultural values of rural life without burdening consumers with high prices and world markets with subsidized output. The agreement can quickly reach the goal of tariff-free trade in manufactured goods, coupled with liberal rules of origin and significant progress on aligning technical standards and conformity assessment systems. The WTO GATS agreement is practically an empty vessel: while the principles and strong and solid, they apply to very little trade. By contrast the Swiss-US FTA can extend the principles quite widely, going so far as strict national treatment for foreign investors, and mutual recognition of professional degrees and certificates.

The economic payoff from these and other terms will be significant: a sharp expansion of bilateral trade, more choice and lower prices for household consumers and industrial users, and an influx of direct investment, especially in Switzerland. The political economy payoff will be even larger, if the Swiss-US FTA becomes a touchstone for future trade and investment agreements.
Phase-outs Schedules for Agricultural Barriers in US FTAs

This appendix describes phase-outs for 15 selected agricultural product-categories and includes a summary table of concessions on selected products across the different FTAs (see Table A.1). The products considered are: beef; corn and corn products; cotton; dairy products; distilled spirits; fruits, vegetables, and nuts; certain grains; processed foods; peanuts; poultry; soybeans; sugar; tobacco; wheat; wine.

**Beef**

**NAFTA, US-Mexico.** The United States and Mexico immediately eliminated tariffs on beef cattle; fresh, chilled and frozen beef; and veal. The only exception is Mexico's import tariff on beef edible offal that was phased-out over a 10-year period.

**NAFTA, US-Canada.** Canadian beef became exempt from quantity restrictions under the US Meat Import Act. US beef was exempted from Canada's quantitative import restrictions.

**US-Australia.** All Australian tariffs on beef imported from the United States will be immediately eliminated under the FTA. The United States will establish preferential TRQs for Australian beef. Out-of-quota tariffs will be phased-out over 18 years. Beef imported within the TRQ will enter the United States duty-free. A volume-based
safeguard will be applied during the transition period; this will be converted to a price-based safeguard after the transition period.

**US-Chile.** Chile established TRQs on US fresh and frozen beef and other meat products, which are eliminated in the fourth year of the agreement. The United States granted reciprocal treatment to Chilean beef products. Both governments agreed to immediately recognize each others’ grading systems. Chilean beef is prohibited from accessing the U.S. beef market because USDA has not recognized Chile’s meat inspection system. A technical group has been formed to eliminate barriers related to inspection procedures.

**US-Morocco.** Morocco will establish two preferential TRQs for US beef. For High Quality Beef (prime or choice) the in-quota tariff will be eliminated over 5 years, while the over-quota tariff in 18 years. For Standard Quality Beef the in-quota tariff will be eliminated over 5 years, while the over-quota tariffs will remain unless Morocco negotiates reductions with other partners. The United States will establish zero duty preferential TRQ for beef imports from Morocco. The over-quota tariff will be phased-out over 15 years.

Beef and beef product and poultry and poultry product imports must be accompanied by an export certificate to be allowed entry into Morocco. Morocco’s veterinary services, in cooperation with the United States Department of Agriculture’s Food Safety and Inspection Service, will work together in good faith to define the content of the certificates that will accompany US beef and poultry imports.
**CAFTA-DR.** Tariffs applied by CAFTA-DR countries on US Prime and Choice cuts of beef are immediately eliminated, except by the Dominican Republic, which establishes a 15-year TRQ. For all other beef products most CAFTA-DR partners will phase-out tariffs within 15 years. El Salvador and Guatemala and the Dominican Republic will establish 15-year TRQs for other US beef cuts. The United States establishes preferential TRQs for beef products originating in CAFTA-DR countries. Over-quota tariffs will be eliminated in 15 years. These preferential TRQs, however, will only kick in after the existing US Section 22 TRQs provided for these countries are filled. CAFTA-DR partners are working toward the recognition of the US meat inspection and certification systems.

**Corn and Corn Products**

**NAFTA:** US-Mexico. The United States immediately eliminated its tariff on corn imports from Mexico. Mexico established a preferential TRQ for corn imports from the United States. The TRQ will be in effect for 15 years and tariff cuts will be back-loaded. Under the agreement, however, to bolster its livestock industry, Mexico liberalized corn imports much faster than required under NAFTA.

**US-Australia.** Australia does not have tariffs on imported corn, and the United States will immediately eliminate its duties on Australian corn.¹

¹ Australia agreed to work with the United States in the WTO agriculture negotiations to develop disciplines that eliminate restrictions on the right to export. Australia has state
**US-Chile.** Tariffs, when different from zero, are immediately eliminated by both countries.

**US-Morocco.** Upon the agreement’s entry into force, Morocco will reduce its tariffs on US corn and corn products by 50 percent. Morocco will eliminate the remaining tariffs on these products over 5 years. The United States will eliminate its tariffs on corn and corn products immediately.

**CAFTA-DR.** Under CBI, US imports of grains from CAFTA-DR countries enjoyed duty-free access already. El Salvador, Honduras and Nicaragua establish preferential TRQs on yellow corn\(^2\), which over-quota tariffs are phased-out over 15 years (10-years phase-out in Guatemala). Costa Rica and the Dominican Republic immediately eliminated tariffs.

El Salvador, Guatemala, Honduras and Nicaragua will not reduce their out-of-quota tariffs for white corn. Some liberalization will occur through duty-free in-quota TRQs, which grow 2 percent per annum in perpetuity. In Costa Rica, white corn tariffs will be trading organizations (STOs) with sole authority to export grains, and these STOs are the object of US negotiating efforts.

\(^2\) In the United States, white corn is considered a food grade corn, while yellow corn is primarily used for animal feed. The distinction is rather arbitrary, and price differentials play a role in explaining the different usages of corn varieties.
gradually eliminated over 15 years. The Dominican Republic will immediately eliminate its tariffs on US white corn.

*Raw Cotton*

**NAFTA: US-Mexico.** Mexico’s tariffs on cotton were phased-out over either 5 or 10 years. Existing US quotas on Mexican cotton were replaced by NAFTA TRQs, which are phased-out over a 10-year transition period. Cotton products are subject to NAFTA rules of origin.

**US-Australia.** Australia continues its duty-free tariff treatment for cotton. The United States will establish a preferential TRQ for Australian cotton, which is phased-out in equal annual steps over 18 years.

**US-Chile.** US import tariffs on Chilean cotton are phased-out over 12 years, while Chile’s import tariff is immediately eliminated. Chile does not produce or export cotton.

**US-Morocco.** Morocco will immediately eliminate its tariffs on US cotton. The United States will establish a preferential TRQ for Moroccan cotton. The over-quota tariff will be phased-out over 15 years.

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3 Nearly 0.9 million acres of white food-grade corn were grown in the United States in 2002, while yellow corn acreage ranged between 1.2 and 1.5 million acres. White corn producers have benefited in the past from preferential access under bilateral FTAs. For example, in recent years, the demand for white corn has increased in Mexico.
**CAFTA-DR.** CAFTA partners will eliminate all duties on US raw cotton immediately. The US import duty on raw cotton from all six countries will be phased-out over 15 years. The agreement establishes rules of origin that strongly favor US cotton and synthetic fabrics.\(^4\)

**Dairy**

**NAFTA: US-Mexico.** The United States established a NAFTA TRQ on imports of milk powder from Mexico. The over-quota tariff was phased-out over 10 years. The US NAFTA TRQ on cheese, also phased-out over 10 years, covered all cheese items previously subject to US Section 22 quotas.

Mexico applied a NAFTA TRQ on milk powder and cheese. The over-quota tariffs were phased-out over 10 years. Tariffs on US exports of fresh cheese and other cheeses to Mexico will be eliminated over a 10-year transition period.

**US-Australia.** Australia locks in its previous duty-free tariff treatment for all US dairy products. The United States will provide Australia with two types TRQ access for dairy items. First, the Australian country-specific dairy TRQs agreed by the United States in the Uruguay Round will immediately receive duty-free treatment for in-quota shipments to the US market. Second, Australia will have additional access through the creation of preferential TRQs. Preferential in-quota volumes will be duty-free and will grow at an

\(^4\) Limited amounts of apparel and textiles that are in short supply in the US market may contain third-country fabrics, whether they are made from cotton, synthetic, or natural fibers.
average of 5 per cent per annum in perpetuity. For many dairy products, out-of-quota tariffs will remain at base year rates. Tariffs on dairy items not included in TRQs will be phased-out over 18 years in most cases. The TRQ system will apply to the following products: American cheese; Cheddar; European-type cheese; Goya cheese; Swiss cheese; cheese, other (NSPF); nonfat dry milk; other milk powders; condensed/evaporated milk; butter/butterfat; creams/ice cream; other dairy products.

**US-Chile.** Chile will phase-out its tariffs on cheeses, butter and butterfat, whey products, and yogurts over 4 years, while tariffs on liquid, condensed and evaporated milk and cream will be eliminated over 8 years. The United States created preferential TRQs for Chilean dairy products, which are eliminated after 12 years. Products covered by the TRQ system include cheeses; butter and butterfat; milk powders; condensed and evaporated milk; and other dairy products including some chocolates and food preparations.  

**US-Morocco.** Morocco will immediately eliminate its tariffs on US pizza cheese and whey products. Tariffs on other US cheeses will be eliminated in 5 or 10 years depending on the product; tariffs on US butter will be eliminated in eight years; and tariffs on US milk powders will be eliminated in 12 or 15 years. The United States will create preferential TRQs for: creams and ice-cream; cheese; milk powders; butter; and other dairy products. Over-quota tariffs will be phased-out over 15 years.

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5 The Food and Drug Administration (FDA) will continue to test and approve imports from Chile. Chile also recognizes the authority of the FDA to approve US food processing plants that are eligible to export to Chile.
CAFTA-DR. The FTA commits all parties to duty-free access for dairy products after 20 years. The FTA establishes reciprocal duty-free TRQs. Most tariffs on over-quota dairy imports are phased-out over a 20-year transition period (for a few products the time period is 10 to 15 years). The United States will apply TRQs to all partner countries on cheese, ice-cream, fluid fresh milk and cream, sour cream, and other dairy products. The US TRQ on butter will affect Costa Rica, El Salvador and Honduras, while the US TRQ on milk powder targets only Costa Rica. CAFTA countries will establish preferential TRQs on US milk, milk powder, butter, cream, cheese, ice-cream, and other dairy. Safeguard duties will also be phased-out within 20 years. All parties may apply quantity-based agricultural safeguards during the transition period.

*Distilled Spirits*

**NAFTA: US-Mexico.** Most US tariffs on Mexican distilled spirits that were not already duty-free were eliminated immediately (e.g. brandy). The major exception was the tariff on rum, which was phased-out over 10 years. US tariffs on beer were phased-out over 8 years. Mexico immediately eliminated the tariff on US Bourbon whiskey, while its tariff on US rum was eliminated 4 years later. Mexican tariffs on beer were phased-out over 8 years.

**US-Australia.** Australia will immediately eliminate tariffs on distilled spirits. Duty-free entry is locked in for distilled spirits that already enter duty-free. With the exception of
rum, all distilled spirits already enjoyed duty-free access into the United States. US tariffs on two rum tariff lines (2208.4020 and 4060) will be removed in 18 years.

**US-Chile.** Chile will fully eliminate tariffs on most distilled spirits in 2 years. With the exception of rum, all distilled spirits already enjoyed duty-free access into the United States. US tariffs on two rum tariff lines (2208.4020 and 4060) will be removed in 12 years. In addition, both countries agree to recognize Bourbon Whiskey, Tennessee Whisky, Pisco Chileno, Pajarete and Vino Asoleado as distinctive products that can only be produced in State of Tennessee or Chile respectively.

**US-Morocco.** Morocco will immediately eliminate its tariffs on all distilled spirits. With the exception of rum, all distilled spirits already enjoyed duty-free access into the United States. US tariffs on two rum tariff lines (2208.4020 and 4060) will be removed in 15 years.

**CAFTA-DR.** All distilled spirits, with no exceptions, will receive duty-free access into the United States. CBI access condition into the US market will not change for some ethyl alcohol products, for example HTS 2207.1060; Central American countries will face TRQs on these products (essentially ethanol). Costa Rica and El Salvador obtained larger TRQs, however, only the US TRQ for El Salvador will expand after year 15.
CAFTA countries will immediately eliminate tariffs on gin and whisky.\(^6\) Tariffs on certain US liquors (tariff lines 2208.70) will be phased-out over 10 years in the Dominican Republic and over 5 years in El Salvador, Guatemala, and Nicaragua. Costa Rica and Honduras granted immediate duty free access for imports those products. All CAFTA-DR countries will phase-out tariffs on US rum over 12 to 15 years\(^7\), with the exception of El Salvador that will phase-out tariffs over 10 years.

\textit{Fruits, Vegetables, and Nuts}

**NAFTA: US-Mexico.** Mexico phased-out tariffs on most US fruit products over 4 years, but it applied a 10-year NAFTA TRQ on apples.\(^8\) Mexico also had a 10-year phase-out for peaches, nectarines and grapes. The United States eliminated tariffs on fruits immediately with the exception of citrus products and melons that were subject to a 10 year NAFTA TRQ.

Under NAFTA, the United States established 10 year TRQs on many vegetable products (15 years for asparagus and broccoli) and reserved the right to apply special agricultural safeguards on imports of certain horticultural products. Mexico matched the US tariff line changes and phase-out periods for imports of vegetable products from the United States, and consequently Mexico eliminated tariffs on most vegetables over 10 years. On

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\(^6\) The Dominican Republic will phase-out its tariffs on gin over 10 years and Costa Rica will phase-out tariffs on whisky over 5 years.

\(^7\) The transition period will last 12 years for Costa Rica and Guatemala, and 15 years for the Dominican Republic, Honduras and Nicaragua.

\(^8\) Mexico may apply special agricultural safeguards on imports of US apples.
potatoes, however, Mexican treatment of US imports differs from this rule as Mexico applied a 10-year NAFTA TRQ.

Both countries immediately eliminated their import tariffs on raisins, prunes, and fresh/dried nuts. The United States may apply agricultural safeguards on imports of onions, tomatoes, eggplants, chili peppers, squash, and watermelons. Mexico, in turn, applies this special safeguard on apples and potato products.

**US-Australia.** Australia locked in already existing duty-free tariff treatment for all US exports of fruits, vegetables and nuts. The United States will eliminate its tariffs for Australian fruits over 4 years. US tariffs on watermelons, cantaloupes, boysenberries, papayas, mangoes, cherries, prunes, other figs will be eliminated in 10 years. Tariffs on Australian canned dates, canned watermelon, canned pears, canned apricots, canned peaches and nectarines, and grapefruit, will be phased-out over 18 years.

US tariffs on most Australian vegetables are eliminated over 4 years. US tariffs on Australian leeks, cauliflower, Brussels sprouts, globe artichokes, celery, spinach, pumpkins, okra, and potatoes will be eliminated over 10 years. US tariffs on aperagus, preserved tomatoes, packed artichokes, Agaricus mushrooms, dried onions, garlic, and certain sweet corn products will be phased-out in 18 years.

The United States immediately eliminates tariffs on nuts and has also established an 18-year preferential TRQ for avocados. The United States maintains phyto-sanitary
restrictions on imports of many Australian fruits, such as avocados and tropical fruit. The United States may impose special agricultural safeguard measures on certain fruits and horticultural products, such as onions, garlic, canned fruits, and tomato products.

US-Chile. Chile immediately eliminated tariffs on all products contained in chapter 8 (fruits and nuts). Many US fruit tariffs are phased-out according to schedules ranging from immediate elimination to 12 years. Tariffs on limes, grapes, pears, kiwis, plums, and raspberries are immediately dropped; tariffs on oranges and mandarins will be phased out over 4 years; and tariffs on lemons, grapefruit, and frozen berries are reduced and then eliminated over 8 years. The tariff phase-out will be completed in 12 years for canned pears, canned apricots, canned nectarines, and canned fruit mixtures. The United States may apply special agricultural safeguards on frozen cherry products, canned pears, canned apricots, canned nectarines, and canned fruit mixtures.

The phase-out period for most tariffs on fresh and processed vegetables in both countries varies by product from immediate elimination to elimination after 8 years. Exceptions on the US side are dried tomatoes, garlic, and onions, mushrooms, sweet corn, Brussels sprouts, leeks, broccoli, carrots, artichokes, spinach, and fresh tomatoes. Chile will eliminate most tariffs on vegetables immediately, except that tariffs on spinach, sweet corn, certain leguminous vegetables and peas will be eliminated over 8 years. The United States may apply special agricultural safeguards on avocados, asparagus, tomato products, garlic, spinach, and broccoli. US tariffs on nuts will be phased-out either immediately or in 4 years for almonds and hazelnuts. Chile will eliminate its tariff on US nuts
immediately. Technical discussions regarding Chile’s phyto-sanitary standards that limit trade are on-going.

**US-Morocco.** Morocco will eliminate most tariffs on US fruits within 5 years. Moroccan tariffs on US raisins will be phased-out over 8 years. Additionally, Morocco will phase-out tariffs on US dates, avocados, dried apricots, dried prunes and plums, dried cherries and peaches over 10 years. Morocco will create a 10-year preferential TRQ for US apples. US tariffs on most Moroccan fruit products will be phased-out within 5 years. US tariffs on Moroccan avocados, boysenberries, papayas, cherries, dried prunes and plums will be phased-out over 10 years. Seasonal tariffs on grapefruits will be phased-out over 15 years. The United States will eliminate tariffs on canned pears, canned apricots, canned peaches and nectarines in 18 years.

Morocco will eliminate tariffs on most US vegetables immediately. Moroccan tariffs on US certain onions, some peas, sweet corn, sliced potatoes, will be phased out over 5 years. Tariffs on US potatoes, seeds of certain peas, dried and broad beans, and lentils will be phased-out over 10 years. Most US tariffs on Moroccan vegetables will be phased-out within 5 years. Tariffs on fresh asparagus will be eliminated over 8 years. The United States will apply 10-year phase-outs for its tariffs on Moroccan leeks, broccoli, celery, spinach, Brussels sprouts, Agaricus mushrooms, preserved olives, preserved oranges, Jerusalem artichokes and Chinese water chestnuts. The US will create 15-year preferential TRQs for Moroccan dried onions, dried garlic, tomato sauces, and other
processed tomato products. Quotas will be lifted at the end of the 15-year period. The US will eliminate tariffs on canned asparagus over 18 years.

US tariffs on walnuts and certain mixes of nuts and dried fruits will be phased out in 5 and 10 years respectively. All other Moroccan nut products will receive duty-free treatment. Morocco will eliminate tariffs on most US nuts over 5 years, and will create a 15 year preferential TRQ for US almonds. Tariffs on US almonds not subject to TRQs will be phased out in 15 years.

The United States has recourse to special agricultural safeguards on imports of certain canned fruits, vegetables such as dried onions and garlic, preserved tomatoes, canned asparagus, canned pears, canned apricots, and other products. Morocco may apply agricultural safeguards on chick peas and lentils, prunes, and almonds. A side letter to the agreement excludes non-bitter almonds, designated by Moroccan HS subheadings 0802.11.0091, 0802.11.0099, 0802.12.0091, and 0802.12.0099, from the list of products subject to special safeguards.

**CAFTA-DR.** Prior to the agreement, imports of all fruits, vegetables and nuts from CAFTA-DR countries enjoyed duty-free access under the CBI.\(^9\) Over 70 percent of US fruit and nut products will be eligible for immediate duty-free access in the CAFTA-DR market. Tariffs will be phased out over the next 5 to 10 years for another 26 percent of all fruit and nut products. Under this plan, US exporters will gain immediate duty-free

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\(^9\) Certain US SPS measures, however, prevented Central American countries from fully benefiting from these preferences.
access for apples, peaches, pears, grapes, cherries, almonds, walnuts, pistachios, raisins, canned peaches, and canned pears. CAFTA tariffs on US oranges, will be phased-out within 5 to 15 years. Costa Rica will eliminate it tariffs on kiwis over 5 years.

Most Central American and Dominican tariffs on mushrooms and sweet corn were immediately eliminated. Tariffs on US fresh and canned tomatoes, and tomato pastes, frozen vegetables, lettuce, cauliflower and broccoli, and canned asparagus will be eliminated over periods up to 15 years by all CAFTA-DR countries.

Other Grains

NAFTA: US-Mexico. Both countries immediately eliminated tariffs on grain sorghum. The United States also eliminated immediately its tariffs on barley and malt, but Mexico imposed a NAFTA TRQ with a 10-year phase-out on these two products. Both countries agreed to 10-year phase-outs on rice tariffs.

US-Australia. Australia does not have any tariffs on imports of wheat, rice, barley, sorghum, or rye oats. The United States will immediately eliminate its duties on barley, corn and sorghum. Oats already enjoyed duty-free access in the US market. US tariffs on parboiled rice will be phased-out over 5 years, while all other varieties of rice will receive immediate duty free treatment.

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10 Australia agreed to work with the United States in the WTO agriculture negotiations to develop disciplines that eliminate restrictions on the right to export. Australia has state trading organizations (STOs) with sole authority to export rice and grains, and these STOs are the object of US negotiating efforts.
**US-Chile.** Tariffs on barley, barley malt, and sorghum are immediately eliminated by both countries. Chilean tariffs on rice falls to zero in equal increments over 12 years. Chile can apply special agricultural safeguards (priced-based) on US rice until tariffs are eliminated. The United States will immediately eliminate tariffs on rice. Oats already enjoyed duty-free access in the US market.

**US-Morocco.** Morocco will immediately eliminate its tariffs on sorghum and oats. Morocco’s tariffs for barley will be phased-out in 5 or 15 years, depending on the final use. Morocco’s tariffs on rice will be phased-out in either 5 years or 10 years, depending on the specific product. US tariffs on sorghum, barley, and rice will be eliminated immediately. Oats already enjoyed duty-free access in the US market.

**CAFTA-DR.** US imports of these other grains from CAFTA-DR countries already enjoy duty-free access. On US barley, oats and rye gain tariffs are immediately eliminated by all CAFTA-DR countries. Costa Rica retains tariffs on sorghum over the transition period. Each US CAFTA-DR partner will establish zero duty TRQs for several varieties of US rice. Out-of-quota tariffs will be eliminated during a transition period of 18 to 20 years. During this transition period, special agricultural safeguards (volume-based) are available to CAFTA-DR countries.

*Other Processed Foods*

**NAFTA: US-Mexico.** US tariffs on some processed fruits and juices imported from Mexico are being phased-out over 10 years. Mexico lowered its duty to match the US rate
and is phasing out from there. The United States and Mexico are applying 15-year NAFTA TRQ tariffs on frozen concentrated orange juice, as well as special agricultural safeguards (price-based). Strict rules of origin apply to NAFTA fresh citrus fruit.

**US-Australia.** Australia locks in immediate duty-free tariff treatment for all US processed foods and beverages (chocolate bars, pet foods, breakfast cereals, soups and broths, fruit juices, pasta, etc.). US tariffs are immediately eliminated for many other processed food products, including soups, and pet foods. US tariffs on certain breakfast cereals and pasta are eliminated over 4 years. US import tariffs on chocolate bars are phased-out over 10-years in equal annual cuts. With the exception of lime juice, which received immediate duty-free treatment, the United States will eliminate its tariffs on most other citrus fruit juices in 4 years (grapefruit) or 18 years (orange and lemon). The United States has recourse to special agricultural safeguards on imports of grape and orange juice from Australia.

**US-Chile.** Initial duty-free quotas are established for some Chilean chocolates and food preparations, and the quotas are eliminated after 12 years. Pet foods, breakfast cereals, soups and broths, and pasta gain preferential access as tariffs fall to zero immediately in both countries. With the exception of lime juice that will receive immediate duty-free treatment, the United States will eliminate its tariffs on all other citrus fruit juices (orange, lemon, grapefruit) in 10 or 12 years. Chile will grant immediate duty-free treatment for US citrus juices. On instant coffee and other coffee extracts and concentrates, the United States will eliminate its tariffs immediately, while Chile will do so over 12 years. The
United States has recourse to special agricultural safeguards on imports of grape and orange juice from Chile.

**US-Morocco.** Morocco will phase-out its tariffs on processed foods over periods ranging from immediate elimination up to 15 years, depending on the product. Morocco will phase-out its tariffs on breakfast cereals, pet food and certain food preparations in 8 years. Moroccan tariffs on soups and broths and nearly all US fruit juices will be phased-out over 10 years.¹¹ A “preference clause” will apply to Moroccan imports of certain US pasta products. On these products, Morocco will establish TRQs that will grow at the annual rate of 2 percent per annum in perpetuity after year 10.

The United States will eliminate immediately its tariffs on food preparations, pet food, pasta, and soups and broths. Tariffs on certain breakfast cereal products will be phased-out over 10 years. US tariffs on most Moroccan citric juices, with the exception of lime juices that receive immediate duty-free, will be eliminated over 15 years. The United States has recourse to special agricultural safeguards on imports of certain fruit juices (e.g. orange juice) from Morocco.

**CAFTA-DR.** Prior to the agreement, US imports of processed foods from CAFTA-DR countries already enjoyed duty-free access under the CBI. El Salvador and Guatemala will immediately eliminate tariffs on US dog and cat food, while the other Central American countries will eliminate duties over 5 to 15 years. Tariffs on US soups will be eliminated over 10 years. The only exceptions are tariffs on certain US apple and pineapple juices that will be eliminated over 5 years.
eliminated immediately in Costa Rica and Honduras, over 5 years in the other three Central American countries, and over 15 years in the Dominican Republic. US exporters will obtain immediate duty-free access on frozen concentrated grapefruit juice in all six countries, and on frozen concentrated orange juice in all Central American countries.

_Peanuts and Peanut Products_

**NAFTA: US-Mexico.** Mexican imports of US peanuts were already duty-free before the NAFTA. The United States established a NAFTA TRQ, which is phased-out during a 15-year transition period. Roasting or blanching of non-NAFTA peanuts does not confer origin. 100-percent Mexican-grown peanuts must be used to make products that qualify for NAFTA preferential tariffs.

**US-Australia.** Australia immediately eliminated tariffs on ground-nuts and ground-nut butter (HS 1202.01, 1202.02 and 2008.11 and 2008.19). The United States will establish preferential FTA TRQs for Australian peanuts and peanut butter. The over-quota rates will be reduced to zero in equal annual steps over 18 years.

**US-Chile.** The United States will grant Chilean peanut exports duty free access on year 12. Meanwhile, tariffs will be phased-out in equal annual cuts. Chile immediately eliminated its tariffs on US peanut butter, and will eliminate its tariffs on US peanuts over 8 years.
**US-Morocco.** Morocco will phase-out tariffs on peanuts and peanut butter over 10 years. Tariffs on peanut oil and flour will be phased-out immediately. The United States will establish a preferential TRQ for peanuts and peanut butter from Morocco. Over-quota tariffs will be phased-out over 15 years.

**CAFTA-DR.** Tariffs on US peanuts and peanut butter are immediately eliminated in most countries, except Guatemala and Nicaragua (5 to 10 years). The United States will establish a preferential TRQ for peanuts and peanut butter for CAFTA countries that will be phased-out over a 15-year period. The United States may apply special agricultural safeguards during the transition period.

*Poultry and other meats*

**NAFTA: US-Mexico.** Most of these products already entered the United States duty-free; with NAFTA, The United States immediately eliminated its remaining tariffs on pork, poultry, and eggs.

Mexico established a 10-year NAFTA TRQ on certain pork products, poultry, and eggs. For Mexico’s TRQ on pork products, the in-quota tariff was phased-out over 10 years. Additionally, Mexico implemented a combination of tariffs with a 10-year phase-out and special agricultural safeguards for slaughter swine, pork and hams. Turkey products received the same treatment as poultry products in both countries.
**US-Australia.** Australia locked in its duty-free tariff treatment for US pork, poultry, lamb and mutton, and immediately eliminated tariffs on certain processed meats. US tariffs on goat, poultry, sausages and preserved meats will be phased-out over a 4-year period. The United States immediately eliminated its tariff on all other pork, and lamb and mutton.

**US-Chile.** Both countries established preferential TRQs on poultry that will be completely liberalized over 10 years. Chile immediately eliminated tariffs on pork and processed pork products. Chile has recourse to special agricultural safeguards (price-based) if import prices of US eggs and turkey drop below certain thresholds. The United States may apply price-based safeguards on imports of turkey from Chile. Chile determined that the US meat inspection system is equivalent to its own. The US tariff on processed pork products will be immediately eliminated. Chilean exporters will gain access to the United States upon approval of Chile’s meat inspection system.

**US-Morocco.** Morocco will create four preferential TRQs for US exports of chicken leg quarters and wings, whole chickens and turkeys, frozen chicken thigh meat, and other frozen poultry meat. The over-quota tariffs will be phased-out in 10 to 25 years using a non-linear formula. For all other products, Moroccan tariffs will be eliminated in 5 to 10 years, except for tariffs on mechanically de-boned chicken and chicken nuggets, strips, and patties that will be immediately eliminated. Morocco has recourse to special agricultural safeguards (quantity-based) for poultry and turkey products. In the case of
chicken leg quarters and wings, Morocco and the United States will evaluate the need for a post-transition safeguard.

The United States will eliminate its tariffs on Moroccan frozen whole chickens and fresh or chilled cuts over 5 years; while US tariffs on frozen chicken cuts will be eliminated over 10 years.

US exports of beef and poultry must be accompanied by an export certificate for entry into Morocco. Morocco’s veterinary services, in cooperation with the United States Department of Agriculture’s Food Safety and Inspection Service, will work together in good faith to define the content of export certificates that will accompany US beef and poultry.

**CAFTA-DR.** Prior to the agreement, US imports of poultry and pork from CAFTA-DR countries already enjoyed duty-free access under the CBI. Tariffs on US poultry products, such as mechanically de-boned meat and wings and breast meat and, will be eliminated immediately or within 5 years by all CAFTA-DR countries. In addition, each CAFTA-DR country will establish preferential TRQs on US chicken legs that expand annually as duties are eliminated in 17 to 20 years. Central American and Dominican tariffs on pork will be eliminated over 15 years. Certain pork products will be subject to duty-free in-quota TRQs that will expire over 15 years. During the transition period, CAFTA-DR countries will have recourse to special agricultural safeguards for these products.
Each CAFTA-DR country is working toward the recognition of the US meat inspection and certification systems in order to facilitate US exports.

Soybeans, soybean meal and soybean oils

**NAFTA: US-Mexico.** Mexican exports of soybeans and soybean meal already enjoyed, or were immediately conferred, duty-free access to the United States. US tariffs on Mexican crude and refined soybean oil were eliminated over a 4-year phase-out period. Mexico eliminated its tariffs on US soybeans, soybean meal, and crude and refined soybean oil over a 10-year period.

**US-Australia.** Australia immediately eliminated its tariffs for all oilseeds and products. Australia gained preferential access as US tariffs fall immediately to zero for soybeans, soybean flour, soybean meal, and cottonseed. US tariffs on Australian crude and refined soybean oil will be eliminated in 10 years, while tariffs on crude and refined peanut oil will be removed over 18 years.

**US-Chile.** Tariffs on soybean and soybean meal are immediately eliminated by both countries. US seeds for sowing were granted immediate duty-free access by Chile. Chile continues to enjoy free access to the US market for these products. US tariffs on crude and refined soybean oil will be removed in 12 years, while tariffs on peanut oils will be eliminated on 10 or 12 years. Chilean tariffs of soybean and peanut oils will be phased-out on a back-loaded schedule over 12 years.
**US-Morocco.** Morocco will eliminate tariffs on soybeans and other oilseeds and soybean meal over the next 5 years. Tariffs on other oilseeds items will be phased-out over 10 years. The United States will immediately eliminate tariffs on soybeans, most other oilseeds and soybean meal. US tariffs on soybean oil will be phased-out over 10 years.

**CAFTA-DR.** Prior to the agreement, US imports of soybean, soybean meal, soybean oil, and other vegetable oil from CAFTA-DR countries already enjoyed duty-free access under the CBI. CAFTA-DR countries will immediately eliminate their tariffs on US soybean and soybean meal. However, Costa Rican tariffs on soybean meal will be eliminated over 15 years. US crude soybean oils gain preferential access since CAFTA-DR tariffs are immediately eliminated in all countries except Costa Rica and Honduras (12 to 15-year phase-outs in these countries). All CAFTA-DR countries will phase-out tariffs on US refined soybean oil over 12 or 15 years. All countries, with the exception of Nicaragua, reserve the right to apply special agricultural safeguards on refined soybean oil.

**Sugar**

**NAFTA: US-Mexico.** The United States and Mexico established NAFTA TRQs on sugar. At the end of year 15, there is supposed to be free trade in sugar between Mexico and the United States. The United States and Mexico will each allow duty-free access to imports of the following sugars: raw sugar that will be refined in the importing country and then re-exported to the original exporting country; and refined sugar that has been refined from raw sugar produced in and exported from the other country. However, since
NAFTA was ratified the United States and Mexico have been involved in continuous disputes over sugar and high fructose corn syrup (HFCS).

Mexican tariffs on sugar-containing products were phased-out over 10 years. The United States established a NAFTA TRQ on sugar-containing products, which was phased-out over a 10-year transition period.

**US-Australia.** Many sugar and sugar containing products already entered duty-free into Australia. For all other sugar and sugar containing products, Australia immediately eliminated its tariffs. US duties are maintained indefinitely on sugar. Australia's sugar access to the United States remains unchanged at 87,402 tonnes per annum. Australia maintains its single desk arrangements for marketing sugar exports to the world. In the wake of the FTA, Australia implemented a new buy-out program for Australian sugar farmers, who were bitterly disappointed by the US refusal to liberalize its sugar market.

**US-Chile.** Chilean duties on sugar and sugar containing products will be eliminated by year 12, but most tariff cuts will occur after year 5. US imports of sugar and sugar containing products are limited by a TRQ that will be phased-out over 12 years.

**US-Morocco.** Morocco will phase-out its sugar tariffs in 5, 10, and 18 years. The United States will establish a TRQ for Moroccan sugar and sugar-containing products. Over-quota tariffs will be phased-out in year 15. Unless it is a net exporter of sugar to the world, Morocco cannot export sugar to the United States.
CAFTA-DR. The United States will establish TRQs for Central American countries and the Dominican Republic. Duty-free in-quota volume is established at 109,000 metric tons (mt) for US imports of CA/DR sugar and sugar-containing products. This quantity will gradually increase over a 15-year period to 153,140 mt. After year 15, the preferential TRQ will increase by 2,000 mt annually in perpetuity. The quantity allowed under the TRQs is the lesser of the amount of each country’s net trade surplus in sugar or the specific amounts set out in each country’s TRQ. The agreement also includes a mechanism that allows the United States, at its option, to provide some form of alternative compensation to CAFTA exporters in place of imports of sugar. US over-quota tariffs on sugar will not change under the CAFTA. The US over-quota tariff is prohibitive, over 100 percent, one of the highest tariffs in the US tariff schedule.

Tobacco

NAFTA: US-Mexico. The United States and Mexico eliminated tariffs on tobacco products over 10 years.

US-Australia. The United States established preferential TRQs for Australian tobacco products. Over-quota tariffs will be phased-out over 18 years. Tobacco products already enjoyed duty-free treatment in Australia.
**US-Chile.** The United States established preferential TRQs for Chilean tobacco products. Over-quota tariffs will be phased out-over 12 years. Chile will eliminate immediately its tariffs on all imports of tobacco from the United States.

**US-Morocco.** The United States established preferential TRQs for Moroccan tobacco products. Over-quota tariffs will be phased-out over 15 years. Morocco will phase-out its tariffs on most tobacco products over 10 years. The exceptions are non-processed tobacco products (HS 2401) that will face transition periods of 5 years.

**CAFTA-DR.** The United States established preferential TRQs for tobacco products originating in CAFTA-DR countries. Over-quota tariffs will be phased-out over 15 years. US tobacco imports from Central America and Dominican Republic that already enjoyed duty-free access under CBI will continue to receive such treatment. CAFTA-DR countries will eliminate tariffs on US tobacco products over 15 years.

**Wheat**

**NAFTA: US-Mexico.** The United States phased-out its tariff on durum wheat imports from Mexico over 10 years. For non-durum wheat from Mexico, the US tariff was eliminated on January 1, 1998. Mexican tariffs on US wheat exports were eliminated over a 10-year transition period.

**US-Australia.** Australia does not have tariffs on imported wheat. It does have a State Trading Organization (STO) with the sole authority to export wheat. Australia has agreed
to work with the United States in the WTO agriculture negotiations to develop disciplines that eliminate restrictions on the right of other firms to export wheat. The United States will immediately eliminate its duties on wheat.

**US-Chile.** Tariffs on durum wheat are immediately eliminated by both countries. Chile committed to eliminate its price band mechanism on non-durum wheat and wheat flour, as it relates to the United States, over a 12-year transition period. Chile has recourse to special agricultural safeguards during the transition period.

**US-Morocco.** Morocco will create preferential TRQs for durum wheat and common wheat. For durum wheat, Morocco’s over-quota tariff will remain in place unless Morocco negotiates a reduction with another partner (e.g., the European Union). The in-quota tariff will be eliminated in 10 years. For common wheat (red wheat), TRQ in-quota quantities are based on Morocco’s domestic production of common wheat. The over-quota tariff will remain in place unless Morocco negotiates a reduction with another trading partner.

**CAFTA-DR.** Prior to the agreement, US wheat imports from CAFTA-DR countries enjoyed duty-free access already under the CBI. With the exception of Costa Rica, which will eliminate its tariffs on US wheat immediately, all CAFTA-DR countries already allowed duty-free access for most US wheat products. Tariffs on US wheat flour will be

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phased out over 12 years in the five Central American countries, and over 15 years in the Dominican Republic.

Wine

**NAFTA: US-Mexico.** US tariffs on most grape wines imported from Mexico were phased-out over 10 years. Mexican tariffs on grape wine were eliminated over 10 years, on wine coolers over 6 years, and on most grape brandies over 10 years.

**US-Australia.** Australia locks in immediate duty-free tariff treatment for all US wine. US tariffs for wine are phased-out over 11 years using a formula similar to that used in the US-Chile FTA.

**US-Chile.** Following a graduated schedule, tariffs in both countries will be eliminated in year 12.

**US-Morocco.** Morocco will eliminate its tariffs on wine over a period of 10 years. The United States will eliminate its wine tariffs using a harmonization formula, under which they will be progressively reduced over ten years to the lowest wine tariff level, before all US wine tariffs are duty-free in year 11.

**CAFTA-DR.** Prior to the agreement, the United States already granted duty-free treatment to wine imports from CAFTA-DR countries under the CBI. These countries will eliminate tariffs on US wine over 5 years.
Table A.1 FTA Phase-Out Terms for Selected Agricultural Products

**Explanation of acronyms**
- TRQs → 18y: Tariff rate quotas will be eliminated in 18 years.
- Tariffs → 8y: Tariffs to be phased out in 8 years.
- Same T: In-quota tariff will remain at its pre-FTA rate.
- Same TRQ: Tariff rate quota will remain at its pre-FTA level.
- Zero: Zero duty before the FTA.
- SFG: Country retains right to invoke special safeguards on this product.
- TRQ (SFG, Tariffs) >> 18y: TRQs (or special safeguards or tariffs) will outlive the 18 year phase-out period.
- Except: Product exception to the phase-out.

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<td>Australia: IMM</td>
<td>Chile: TRQ → 4y</td>
<td>Morocco: TRQs &gt;&gt; 18y</td>
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<td>Poultry</td>
<td>Mexico: TRQ→ 10y</td>
<td>Australia: Zero</td>
<td>Chile: TRQ → 10y</td>
<td>Morocco: TRQ → 25y</td>
<td>CAFTA-6: TRQ → 20y</td>
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<td>Australia: Zero</td>
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<td>Turkey</td>
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<td>CAFTA-6: TRQs &gt;&gt; 15y</td>
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<td>Soybeans a</td>
<td>Mexico: Tariffs → 10y</td>
<td>Australia: IMM</td>
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<td>Soybean oils</td>
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Note:
- a. Soybean flour, meal, and beans.
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THE SHAPE OF A FREE TRADE AGREEMENT BETWEEN SWITZERLAND AND THE UNITED STATES

Appendix B

SPS Measures in US and Swiss Trade Agreements

A. SPS Measures in US Trade Agreements

*NAFTA*¹

The NAFTA Sanitary and Phytosanitary (SPS) agreement disciplines the development, adoption and enforcement of SPS measures. These disciplines are designed to prevent the use of SPS measures as disguised restrictions on trade, while safeguarding each country's right to take SPS measures to protect human, animal or plant life or health.

NAFTA encourages the use of relevant international standards in the development of SPS measures. At the same time, NAFTA confirms the right of each country to establish the level of SPS protection that it considers appropriate (e.g., more stringent rules) as long as the SPS measures meet three tests: they are based on scientific principles and a risk assessment; they are applied only to the extent necessary to provide a country's chosen level of protections; they do not result in unfair discrimination or disguised restrictions on trade.

¹ The Section on NAFTA draws extensively on information available on the USDA Foreign Agricultural Service (FAS) website.
Against the background of these principles, the NAFTA parties agreed to work toward equivalent SPS measures. Each NAFTA country committed to accept the SPS measures of another NAFTA country as equivalent to its own, provided that the exporting country demonstrates that its measures achieve the importing country's chosen level of protection. NAFTA requires public notice prior to the adoption or modification of any SPS measure that may affect trade in North America.

The NAFTA establishes standards for risk assessment, including standards for evaluating the likelihood of entry, establishment, or spread of pests and diseases. Risk assessment methods should reflect techniques developed by international or North American standards organizations.

The section on regional conditions establishes rules for the designation of pest-free or disease-free areas and areas of low-pest or low-disease prevalence. An exporting country, for example, must provide objective evidence proving that its goods originate in a pest-free or low-pest prevalence area.

A SPS Committee was established to facilitate the enhancement of food safety and sanitary conditions; promote the harmonization and equivalence of SPS measures; facilitate technical cooperation and consultations; and consult on disputes involving SPS measures.

*US-Australia FTA*
SPS issues were a central part of the negotiations between the United States and Australia. Though both countries apply strict SPS protection, Australia’s approach to quarantine is considered conservative. Before the negotiations, US stakeholders argued that Australia’s SPS measures unjustifiably limited US access. The Australian government welcomed consultations within the context of the negotiation as an opportunity to placate US critics of the quarantine system.²

During the negotiation, an *ad hoc* group was established, and the first meeting was held in August 2002. High priority issues for the United States included market access for pork, California table grapes, Florida citrus, stonefruit, and poultry meat. Australia identified access for feeder cattle, honeybees, Riverland citrus, cherries, and a variety of tropical fruits as its priority issues.

The final text of the US-Australia FTA reaffirms the parties’ commitment to WTO rules and to science-based decision making on matters affecting quarantine and food safety. The WTO SPS Agreement will be applied should a dispute arise between the parties. The dispute mechanism under chapter 21 of the FTA specifically does not apply to Chapter 7 (SPS provisions).

The US-Australia FTA also establishes a framework for discussing specific products. This framework consists of an SPS Committee and a Standing Technical Working Group

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on Animal and Plant Health Measures. The inclusion of a working group is a unique feature of the US-Australia FTA that is not found on any other US bilateral FTA.³

The SPS Committee is a forum for discussing general matters and enhancing the understanding of SPS regulatory processes. An official of the Australian Department of Agriculture Forestry and Fisheries, Virginia Greville, stated in her testimony to the Australian Senate:⁴

… the idea of the overarching SPS Committee is very much cooperation, increasing understanding and providing each with the opportunity to explain to each other how [each understands and applies the WTO agreement] so that misunderstandings do not occur and accusations do not fly backwards and forwards about bad citizenship under the WTO and SPS agreements.

The Working Group will focus on technical and scientific aspects of quarantine matters relating to trade in specific animal and plant products. According to an APHIS Technical Trade Report, the Working Group “would provide a forum for the parties to engage at the earliest appropriate time in each other’s regulatory processes on such issues [technical and scientific aspects] and to cooperate in developing science based measures that facilitate trade between them.”⁵

Despite the fact that the Working Group and the SPS Committee are not decision making bodies, their establishment generated controversy in Australia. Much of the debate

³ Other US bilateral FTAs, such as US-Chile, contemplate the possibility of establishing working groups, but these are not established in the agreement.
reflected a fear of unknown consequences and anxiety over the interpretation of key provisions. For example, the agreement mandates the SPS Committee to “review progress on and, as appropriate, resolve through mutual consent, sanitary and phytosanitary measures.” Annex 7-A specifically mentions “resolving specific bilateral animal and plant health matters” and “whenever possible, achieving consensus on scientific issues” as objectives of the Working Group. No other US bilateral FTA contains such explicit language on the purpose of the SPS Committee. The US-Chile FTA, for example, uses the weaker expression “shall provide a forum for” rather than “mandating” the SPS Committee to resolve and review progress on outstanding SPS measures.

Australian government officials highlighted that these are nonetheless consultative bodies for the discussion of technical and scientific interest. The Australian chief negotiator, Stephen Deady, said “there is nothing in the establishment of these committees that will impact on the integrity of the Import Risk Analysis processes in Australia.”

Nevertheless, the Federation of Australian Scientific and Technological Societies objected that the Working Group and the SPS Committee are bureaucratic instruments to facilitate trade but “may undermine the fundamental role that proper scientific analysis

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must have in a sound quarantine system.” The Australian Senate Select Committee points out, in reference to the demands of US exporters, “there has been some comment that the bilateral committees may have the potential to be *de facto* dispute settlement regimes.” Some critics noted that, even if the Working Group and SPS Committee do not become dispute settlement mechanisms, they will nonetheless allow the United States to exercise pressure on Australian quarantine decisions. Consequently, Australia’s reputation for a strong SPS regime may be watered-down. Still, the Senate’s Select Committee concluded that “Australia’s processes may be robust enough to withstand such pressure should it arise.”

In a Side Letter to the Agreement, the United States and Australia agreed to work cooperatively in the OIE, Codex, and other forums with the objective of securing science-based standards and guidelines that address risks to food safety and animal health from BSE.

*US-Chile FTA*

According to Animal and Plant Health Inspection Service (APHIS), the successful negotiation and ratification of the US-Chile FTA made it a roadmap for subsequent SPS discussions “in the Western Hemisphere and elsewhere.”

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7 The Federation of Australian Scientific and Technological Societies (FASTS) was established in 1985. The Federation consists of societies representing the interests of Australian scientists and technologists. [http://www.FASTS.org](http://www.FASTS.org).
Before the negotiations, stakeholders in both countries had expressed concerns with elements of the other party’s SPS regime. For example, the United States prohibited importation of meats from Chile, while Chile limited market access for some US fruit and meat products.

As in the US-Australia FTA, an *ad hoc* special working group was established during the negotiations to address outstanding SPS issues. Though these SPS discussions did not take part within the formal negotiations of the FTA, they went as far as possible in finding technical solutions before Congressional ratification.

Some solutions involved modifications to SPS import measures in each party. These modifications improved market access conditions for horticultural, meat and dairy products of both countries. According to DIRECON, the principal achievements of the working group were,\(^{10}\)

- The partners reached an equivalence agreement on meat-cut classification systems for bovine meats.
- Chile recognized the US inspection system for bovine, pork, and sheep meat. The United States established a work plan to extend recognition to the Chilean inspection system for those same products. A bilateral work plan was established to exchange recognition of inspection systems for poultry meats.

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\(^{10}\) This information is available on the US-Chile FTA section in the DIRECON website. See www.direcon.cl
• The United States began work to recognize Chile as “classical swine fever free” country.
• The Chilean Secretaría de Agricultura granted the US FDA authority to inspect, on behalf of Chile, US producing plants that export dairy products to Chile.
• Chile authorized the importation of Californian pit-containing fruits, and advanced regulatory reforms to allow access to California citric products and cherries, and Florida grapefruits.
• The United States agreed to speed up regulatory changes to allow imports of Chilean clementines.
• Both countries pledged to work to harmonize measures regulating the importation of tomatoes.

The US-Chile FTA reaffirms the parties’ commitment to WTO rules and to science-based decision making on matters affecting human, animal and plant safety. The WTO SPS Agreement and Dispute Settlement Mechanism will be applied should a dispute arise between the parties on SPS matters.

Chapter 6 also establishes an SPS Committee charged with overseeing the implementation of the WTO SPS Agreement between the parties and providing a forum for technical discussions on the application of SPS measures in each country. The SPS Committee will “review progress on addressing sanitary and phytosanitary matters” that may arise between the parties and “enhance mutual understanding and consultation on SPS regulatory processes.” The SPS Committee may establish ad hoc working groups,
but, unlike the US-Australia FTA, the agreement itself does not establish a standing working group.

Since the entry into force of the US-Chile FTA in January 2004, the SPS Committee has dealt with outstanding SPS issues. The SPS Committee established two *ad hoc* working groups, one on grapes and another on meats. In July 2004, APHIS declared Chile to be “free of classical swine fever” country. The US Food Safety and Inspection Service (FSIS) conducted two *in loco* audits to certify the Chilean red-meat inspection system. In December 2004, the USDA allowed the importation of Chilean clementines and tangerines into the United States. In May 2005, the USDA published proposed rules and regulations that include Chile to the list of countries eligible to export meat and meat products to the United States. These proposed rules and regulations recognize the Chilean inspection system as equivalent to the Federal Meat Inspection Act and its implementing rules. The proposed amendment will eliminate the current prohibition of importation of importation of Chilean meat products of cattle, sheep, swine, goats, horses, mules, or other equines. Still pending are regulatory changes that will facilitate bilateral tomato, and poultry trade as well as the importation of Chilean grapes into the United States.

**US – Central America and Dominican Republic FTA (CAFTA-DR)**

Central American products already enjoyed duty-free access through CBI and therefore the need to address non-tariff barriers, including SPS barriers, was a priority for these countries. Central American countries considered that certain US SPS measures had prevented them from obtaining the full benefit of CBI preferences. For example, fruit
flies in Central America have prevented the export of fruits and vegetables to the United States without costly treatment.

Many US exporters had likewise complained about the application of SPS measures in CAFTA-DR countries. Some US producers had pointed to lengthy, complex and in some cases arbitrary processes of SPS approval; costly local testing requirements, temporary bans on exports of beef and poultry products, and the use of sanitary certificates as an import licensing device for meat and dairy products.11

This negotiation differed from the US-Chile FTA and the US-Australia FTA, in that the Central American partners enjoyed a relatively poor SPS infrastructure. A study by researchers from the Texas A&M University on the phytosanitary capacity needs of Central American nations indicated, among other findings, that most of these countries lacked a sufficient number of employees and appropriate laboratories for inspection services.12 Since SPS infrastructure deficiencies limited the ability of CAFTA-DR countries to gain market access, the United States pledged technical assistance from US sanitary and agriculture agencies. According to the USTR, “the objective [of SPS

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negotiations] was to leverage the impetus of active trade negotiations to seek difficult changes to the Central American countries’ SPS regimes.”

A parallel working group on SPS measures was established during the negotiations of CAFTA to exchange views on outstanding SPS issues and improve market access for all parties. Several achievements were reported by the USTR:

- The United States obtained a commitment from the Central American nations to resolve specific measures affecting US exports to those countries.
- Central American countries pledged to move towards recognizing import eligibility for all producing plants inspected under US safety and inspection system, in particular for meat, dairy, and poultry products.
- The United States committed to resolve delays in food inspection procedures for meat and poultry products from Central America.
- The United States presented a schedule for the resolution of sanitary issues that affect the export of poultry, dairy products, tomatoes and peppers from Honduras.
- Nicaragua received help solving SPS problems for exports of cheese, papaya, pitahaya, peppers, and tomatoes.
- Costa Rica obtained guaranteed access of ornamental plants over eighteen inches in height, more flexible sanitary treatment for some of its flower exports, and recognition of its poultry inspection system.

14 Dominican Republic did not participate in this groups because it negotiated separately with the United States.
The CAFTA-DR agreement reaffirms the rights and obligations under the WTO SPS Agreement. No country will have recourse to the dispute settlement under the CAFTA agreement for any matter arising under Chapter 6 (SPS Measures).

Article 3 of Chapter 6 of the agreement also establishes an SPS Committee that will continue the work of the ad hoc working group. The SPS Committee provides a forum for technical discussion on the application of SPS measures in each country. It reviews progress on outstanding SPS issues and provides an avenue for consultation on SPS regulatory processes. The CAFTA-DR SPS Committee is instructed to help each party implement the SPS agreement and assist each party to protect human, animal, or plant life or health.\(^\text{15}\)

Another unique feature of CAFTA-DR’s SPS Committee is the requirement to facilitate a Party’s response to a written request for information (from another party) with minimal delay. Other provisions in the CFTA-DR SPS Committee are nearly identical to those in the US-Chile FTA, with the exception that CAFTA-DR SPS Committee’s decisions will be taken by consensus (a feature necessitated by the presence of representatives from 5 Central American countries, the Dominican Republic and the United States in the committee). Also, unlike the US-Chile FTA, Annex 6.3 of CAFTA lists the agencies of each party that will participate in the Committee.

\(^{15}\) SPS Committees under US-Chile FTA and US-Australia FTA include objectives geared to “enhance each party’s implementation” of the SPS agreement. The language is stronger in the case of CAFTA, reflecting the greater need of support in Central America. Also, the SPS Committees under US-Chile FTA and US-Australia FTA are not instructed to “assist parties to protect”, but rather just to “protect” human, animal, or plant life or health.
US-Morocco FTA

SPS issues did not play a significant role in negotiations between the United States and Morocco. The agreement does not include a chapter on SPS measures and treats the subject in three short articles. The provisions are general in nature, including a reaffirmation of existing rights and obligations under the WTO SPS Agreement and the absence of recourse to dispute settlement under the US-Morocco FTA for SPS issues.

The parties “affirm their desire” to provide a forum for addressing SPS, but the agreement does establish a SPS Committee. According to the APHIS Trade Support Team, given the lack of SPS issues and the relatively small volume of bilateral agricultural trade, “the US strategy was to reaffirm the commitments under the WTO SPS agreement.” Still, in side letters between Moroccan and US officials, Morocco pledged to accept US export certificates issued by USDA FSIS for beef and poultry products.

In the negotiations, Morocco attempted to obtain commitments on technical assistance and market access, but the United States was not responsive. According to APHIS “By initially expecting too much and then failing to scale back expectations to more realistic parameters, Morocco may have lost some genuine opportunities for receiving US technical assistance”.16 On market access, Morocco expected APHIS approval of some

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16 Morocco had sought a US commitment to upgrade Morocco’s entire plant and animal health infrastructure. The US authorities pointed out that Morocco failed to prioritize their needs, demonstrate how that assistance would facilitate trade, or explain how that assistance could be coordinated with technical cooperation from the European Union. See APHIS Trade Support Team, Technical Trade Report. July 2004
plant products for entry in the United States. The United States refused to circumvent normal procedural channels and deemed the request as “not appropriate for FTA negotiations”. Perhaps as a consolation, a subcommittee for discussion of SPS matters was established in a side letter. Even here, the United States agreed reluctantly. Given the “lack of substantive issues on both sides,” the forum will convene only on an as-needed basis.

US-EU Veterinary Agreement

Early efforts to tackle outstanding SPS matters preceded the US-EU Veterinary Agreement. The US-European Community Agreement on Meat Inspection Standards of November 1992 touched upon some of the issues that later were revisited in the US-EU Veterinary Agreement. Through the 1992 agreement, the parties agreed: to recognize the equivalence of regulatory requirements with respect to trade in fresh bovine and swine meat; to consider the possibility of approving plants certified by the other party’s responsible authority; and to initiate discussions as soon as possible on other problems in the veterinary field.

The US-EU Veterinary Agreement entered into force in August 1999. Under the agreement, the parties reaffirmed their multilateral obligations. The scope of the 1999 agreement was limited to sanitary measures applied to the live animals and animal products listed in Annex I. For these products, the agreement includes provisions with regard to equivalency determination on health requirements, consultations, exchange of

17 APHIS Trade Support Team, Technical Trade Report. July 2004
information, notification on disease developments, scientific exchange, verification and audit.

Article 6 of the Veterinary Agreement recognizes the principle of regionalization. Specifically, the importing party recognizes for trade purposes the health status of regions as determined by the exporting party. However, this provision applies only with respect to the animal and aquaculture diseases specified in Annex III. BSE (Mad cow disease) is not listed in Annex III.

Annex V lists the live animals and animal product areas, sectors, or parts of sectors, and sets forth the status of consultations regarding the recognition of equivalency of a party’s sanitary measures and the applicable trade conditions.

The Veterinary Agreement establishes a Joint Management Committee. At least once a year, the Committee reviews activities under the agreement and recommends changes to the annexes. The Parties agree to establish technical working groups to identify and address technical and scientific issues arising from the Agreement.

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18 In its most recent “Annual Report on Barriers to Trade and Investment in the United States”, the EU Commission argues “the United States has failed repeatedly to apply the regionalisation provisions of the Veterinary Agreement”.

19 The list of diseases for which regional designation is recognised includes: Foot and mouth disease, Swine vesicular disease, Peste de petits ruminants, Contagious caprine pleuropneumonia, Sheep and goat pox, African swine fever, Enterovirus encephalomyelitis, Newcastle disease, Pseudorabies/Aujeszky’s disease, Vesicular stomatitis, Rinderpest, Contagious bovine pleuropneumonia, Bluetongue, African horse sickness, Classical swine fever, Fowl plague (avian influenza), Venezuelan equine encephalomyelitis.
At a meeting in October 2003, the Joint Management Committee issued a recommendation concerning the determination of equivalence for gelatin and collagen for human consumption. As a result of this recommendation, the United States and the European Union agreed to amend Annex V to the Agreement to incorporate these new equivalences.

It is worth pointing out that the European Union and the United States have used other channels to deal with outstanding SPS issues. For example, in 2002, the resumption of exports of Spanish clementines to the United States and the resumption of US poultry exports to the European Union were resolved within the context of the Positive Economic Agenda Initiative. Yet the European Union still lists 10 US SPS measures as “non-tariff barriers”.  

**SPS Matters in Memorandums of Understanding (MOUs)**

To date the United States has signed six MOUs that include SPS provisions: Argentina, China, Colombia, Peru, Russia, and Uruguay. With the exception of the Argentinian

20 These are: Plants in Growing Media; Bovine animals and products; Pathogen-free Areas; Hardy Nursery Stock; Goats/Risk of Scrapie; Non-Comminglement; Uncooked Meat Products; Inspection of Egg Production; Columbia- Meat/On-site Inspection; meat and meat products. More information at: http://mkaccdb.eu.int/cgi-bin/stb/mkstb.pl#nontarbarr.

21 The Memorandum of Understanding between the United States and Argentina was signed within the framework of the Uruguay Round of Multilateral Trade Negotiations and is significantly different from other MOUs.

22 In all cases, the timing of the MOUs was linked to broader trade issues. Signatures on MOUs with Colombia and Peru (April 2003 and October 2002) correspond to the launching of FTA negotiations with the United States. Uruguay has repeatedly made public its desire to engage in FTA negotiations with the United States, but other commitments, notably its membership in MERCOSUR, have limited the US interest.
MOU, the MOUs establish bilateral Consultative Committees on Agriculture that provide a forum for resolving trade issues and cooperating in a number of areas, including food safety, animal and plant health, and biotechnology.

Article IV of the US-China MOU, signed before China’s accession to the WTO, calls for science-based SPS requirements administered in a non-discriminatory manner. The MOU also calls for continuous scientific and technical consultations concerning scientifically unjustified SPS restrictions. In 2004, Chinese and US authorities exchanged letters of intent where they pledged to “further enhance” their technical exchanges and long-term cooperation in the field of food safety and animal and plant health. The letters establish a consultative mechanism to “demonstrate their strong commitment to work cooperatively to address outstanding bilateral SPS issues in accordance with each country’s domestic rules and regulations.”

The MOUs with Peru, Colombia and Uruguay, do not include a reaffirmation of WTO commitments, but they do establish Consultative Committees on Agriculture (CCA). Former Secretary of Agriculture Ann Veneman stated that these CCAs “set the stage for improved communication and coordination in a number of areas including food safety, research and sanitary and phytosanitary issues.”

Following President Jorge Batlle’s February 2002 visit to the White House, however, the United States and Uruguay established a Joint Commission on Trade and Investment. The Commission has pursued a work plan and the MOU on Agriculture dates from April 2003, while a Bilateral Investment Treaty was concluded in September 2004. The US MOUs with China and Russia date from periods when neither country was a WTO member (October 1992 and September 2003), but both were engaged in WTO accession.
B. SPS Measures in Swiss Trade Agreements

SPS Issues in the Swiss-EU Agricultural Agreement

The Swiss-EU Agricultural Agreement (June 2002) aims to facilitate trade in farm products by eliminating tariff and non-tariff barriers. The agreement addresses SPS issues in Annex 4 on plant health, Annex 5 on feed, Annex 6 on seeds, and in Annex 11 on animal health. With the exception of Annex 5 that it is still under negotiation, all of these annexes go to great lengths in establishing the equivalence of EU and Swiss SPS regulations. According to the Swiss Integration Office (DFA/DEA), “The agreement will reduce or eliminate altogether a number of technical barriers in the veterinary bracket (dairy hygiene, epizootic diseases) and in relation to pesticides, animal feeds, seeds, biological products and rules for the sale of wines, generally on the basis of arrangements which arise out of the mutual recognition of the equivalence of each other's legislation.”

In this Appendix we focus our discussion on Annexes 4 and 11.

Annex 4, Plant Health. Annex 4 recognizes the equivalence of protection levels resulting from domestic legislation on the introduction and propagation of harmful organisms. The equivalence, however, applies only to those plants and plant products listed in Appendix 1 of the Agreement. For these products, the parties recognize the “plant passports” issued by responsible organizations in each country. Such passports

23 Additionally, Annexes 5, 6, 9, 10 recognize legislative equivalence and eliminate border conformity checks for certain animal feed, seeds, organic products, and fruits and vegetables. However, these annexes deal more directly with standards rather than SPS measures.

attest conformity with those pieces of domestic legislation deemed equivalent under the agreement, and fulfill the documentary requirements for movement of plants and plant products laid down in the Agreement. The annex also limits border checks: plant health sampling may not exceed certain percentages of consignments of plants and plant products.\textsuperscript{25}

Annex 4 requires countries to inform other parties of any proposal to adopt new plant-health measures with respect to plants and plant products listed in the agreement. Countries can apply derogations with respect to regions or the entire territory of other parties, so long as they indicate their reasons. Derogations may be applied immediately, but parties must engage in consultations with a view to finding appropriate solutions.

Finally, Annex 4 establishes a Working Group on Plant Health that will consider all matters that may arise in connection with the Annex and its implementation. The Working Group may submit proposals to update Appendices to the Agricultural Committee.

\textbf{Annex 11, Veterinary Annex.} Also known as the Veterinary Agreement, the Veterinary Agreement regulates trade in live animals and animal products such as semen, embryos, foods of animal origin, and animal waste. The Veterinary Agreement establishes that Swiss animal disease control legislation is identical in substance and achieves the same

\textsuperscript{25} The agreement establishes a maximum sampling limit at 10 percent of consignments. Moreover, the percentage will be set on product-by-product basis in accordance with plant-health risk determined by the Agricultural Committee based on proposals from the Working Group on Plant Health.
objectives as the corresponding EU legislation; consequently, the Veterinary Agreement grants Switzerland similar trading conditions with the European Union as enjoyed by EU member states.

The agreement stipulates neither border checking of products nor of animals, but it allows border inspection of accompanying documents to ensure compliance with animal protection legislation. Still, the simplification of border checks will not entail the elimination of product inspections. They will just be done away from the border. According to the Swiss Federal Veterinary Office, “unavoidably, to maintain the health of the animal population at its current high level, more checks will have to be conducted within the country (as practiced in EU member states)”.

With regard to live animals, semen and embryos, the parties recognize that certain products and animals of each party are free of specific diseases. For example, Switzerland obtained guarantees on the status of pigs (Aujeszky’s disease), cattle (Brucellosis, tuberculosis, and IBR/IPV), sheep and goats (Brucellosis), and poultry and hatching eggs (“not vaccinating” against ND). Since June 2003, Switzerland has requested the extension of guarantees to include other diseases that are not found in Switzerland; however, “the European Union categorically refuses any extension of guarantees.”

The Veterinary Agreement prevents countries from placing embargoes on imports of animals without a good reason. Outbreaks of disease are, however, a good reason.

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Concerning foods of animal origin, the European Union recognized only the Swiss legislation on milk and dairy products as equivalent to its corresponding legislation. The easing of restrictions on exports for other food products of animal origin will require the harmonization of the Swiss Ordinance on Foodstuffs with the corresponding EU legislation. In late 2003, the Swiss Federal Veterinary Office stated that it began efforts to tackle these pending issues, and it was preparing a proposal for discussion in the Joint Committee.

The Joint Committee oversees the application and functioning of the bilateral Swiss-EU agreements as well as the Veterinary Appendix. To date, three working groups have been established: The Animal Health Working Group (dealing with issues regarding the certificates used in cross border trade); the Working Group for Animal Movement (dealing with matters related to the simplification of border checks); and the Bovine Spongiform Encephalopathy - BSE Working Group (analyzing alternatives so as to lift the ban on imports of Swiss cattle). In the BSE Working Group, a draft text was drawn up proposing the adoption of EU regulations. At the end of 2003, the EU Council of Agricultural Ministers recognized the equivalence of Swiss regulations regarding BSE, allowing the resumption of exports of Swiss cows to the European Union.

_PSP Issues and Recent Swiss/EFTA’s Bilateral FTAs_

Recent bilateral FTAs negotiated by EFTA include, for the most part, rather weak approaches to tackling SPS matters. This may reflect the absence of outstanding SPS
issues and the small volumes of bilateral agricultural trade. Also, agricultural liberalization has not been a high concern for Switzerland in bilateral FTAs, as evidenced by the low wedge between applied preferential and MFN tariff rates.

Many recent EFTA FTA agreements include commitments to apply SPS regulations in a non-discriminatory fashion and prevent the implementation of new measures that may have the effect of “unduly obstructing trade”. The EFTA-Jordan FTA, EFTA-Macedonia FTA, EFTA Morocco FTA, EFTA-Palestine Authority FTA, and EFTA-Romania FTA limit their treatment of SPS matter to these provisions. The EFTA-Croatia FTA, EFTA-Lebanon FTA, and EFTA-Singapore FTA include an additional provision that reaffirm obligations under the WTO SPS Agreement. The EFTA-Mexico FTA and EFTA-Tunisia FTA only reaffirm rights and obligations under the WTO SPS Agreement. Among bilateral FTAs, only the EFTA-Chile FTA stands out in that it treats SPS issues to a greater length than the other agreements.

The FTA agreement between EFTA and Chile goes beyond the other agreements as the parties pledge to strengthen their cooperation in the field of SPS measures with a view towards increasing the mutual understanding of their respective systems. Expert consultations may be convened at the request of a party. Parties shall designate and exchange “contact points”. Finally, the agreement calls for the development of bilateral arrangements between respective regulatory agencies for better implementation of the SPS provisions under the agreement.
A. GI Provisions in Selected US FTAs

US-Australia FTA

According to Article 17.2 of the agreement, titled “Trademarks, including geographical indications”, each Party will provide that geographical indications are eligible for protection as trademarks. Article 17.2 also provides that grounds for refusing an application for protection or recognition of a geographical indication include the following:

(A) The geographical indication is likely to cause confusion with a mark [trademark] that is the subject of a good-faith pending application or registration; and

(B) The geographical indication is likely to cause confusion with a preexisting mark [trademark], the rights to which have been acquired through use in good faith in the territory of the Party.

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In the event a refusal is made, the parties will provide the applicant a written communication of the reasons for the refusal, and allow the applicant the opportunity to respond. Interested parties must also have the opportunity to oppose registration or seek cancellation after registration.

US-Chile FTA

The US-Chile FTA also treats geographical indications as trademarks. To qualify for this treatment, GIs must satisfy the same conditions that apply in the US-Australia FTA. Chile specifically recognizes Bourbon Whiskey and Tennessee Whiskey as distinctive products of the State of Tennessee. Accordingly, Chile will not permit the sale of any product as Bourbon Whiskey or Tennessee Whiskey, unless it has been manufactured in the United States in accordance with the laws and regulations of the United States governing the manufacture of Bourbon Whiskey and Tennessee Whiskey.

The United States recognizes *Pisco Chileno* (Chilean Pisco), *Pajarete*, and *Vino Asoleado*, which are authorized in Chile to be produced only in Chile, as distinctive products of Chile. Accordingly, the United States will not permit the sale of any product as *Pisco Chileno* (Chilean Pisco), *Pajarete*, or *Vino Asoleado*, unless it has been manufactured in Chile in accordance with the laws and regulations of Chile governing the manufacture of *Pisco, Pajarete*, and *Vino Asoleado*.

The US-Chile FTA applies the principle of "first-in-time, first-in-right" to trademarks and geographical indications. This means that the first to file for a trademark is granted the first right to use that name, phrase or geographical place-name.
CAFTA-DR

The agreement uses a similar definition as to the US-Australia FTA and the US-Chile FTA. However, it expands on “Procedures with Respect to Geographical Indications”. Each party will provide the legal means to identify and protect geographical indications and will provide the means for persons of another party to apply for protection or petition for recognition of geographical indications. Countries commit to limit the formalities on the application procedure and to publicize GI petitions. Each party will ensure that similarities between a geographical indication and a pre-existing trademark constitute grounds for refusing protection or recognition of a geographical indication. The US-Morocco FTA has similar language.

US-European Community Distilled Spirits and Spirit Drink Agreement

This agreement was based on an exchange of letters between the United States and the European Union in March 1994. This agreement provides for the mutual recognition of distilled spirits. The key provisions are as follows:

“The USA agrees to restrict, within its regulatory framework (27 CFR 5.22 or an equivalent successor regulation), the use of the product designations: "Scotch whisky", "Irish whiskey"/"Irish whisky", "Cognac", "Armagnac", "Calvados" and "Brandy de Jerez" to distilled spirits/spirit drinks products of the Member States of the European Community, produced in compliance with Council Regulation (EEC) No 1576/89 and with the laws of the Member States in which those products originate. Further, it is recognized that these products shall continue to
be subject to all of the labeling requirements of the USA.”

“The European Community agrees to restrict, within its regulatory framework (Council Regulation (EEC) No 1 576/89, Article 11 or an equivalent successor regulation), the use of the product designations: "Tennessee whisky"/"Tennessee whiskey", "Bourbon whisky"/"Bourbon whiskey" and "Bourbon" as a designation for Bourbon whisk(e)y to distilled spirits/spirit drinks products of the United States produced in compliance with US laws and regulations (27 CFR 5.22 or an equivalent successor regulation). Further, it is recognized that these whiskies shall continue to be subject to all of the labeling requirements of the European Union.”

B. GI Provisions in Selected Swiss FTA

EFTA-Israel

The agreement was signed in September 1992. Article 1 of Annex V, titled definition and scope of protection, states that intellectual property protection includes protection of geographical indications. Article 3 of that same Annex, titled additional substantive standards, affirms that “the Parties shall ensure in their national laws at least adequate and effective legal means to protect geographical indications, including appellations of origin, with regard to all products, at least to the extent that their use is misleading the public.” The EFTA-Romania FTA, signed in December 1992, includes similar text.
**EFTA-Bulgaria**

The agreement was signed in March 1993. The agreement’s original provisions on intellectual property rights were revised by Decision of the Joint Meeting of the EFTA-Bulgaria Committee No. 7 of 1997. Article 1 of Annex X, on the definition and scope of protection, states that intellectual property protection comprises protection of geographical indications, including appellations of origin. Article 3 of Annex X, titled additional substantive standards, states that parties to the agreement “shall ensure in their national laws at least adequate and effective means to protect geographical indications, including appellations of origin, with regard to all products and services.” Other Agreements with similar text include EFTA-Croatia (2001); EFTA-Jordan (2001); EFTA-Macedonia (2000), EFTA-Morocco (1997), EFTA-Turkey (1991).

**EFTA-Mexico**

The agreement was signed in November 2000. Provisions under Article 1, definition and scope of protection, are similar to those of EFTA-Bulgaria, Article 3 of Annex XXI, on additional substantive standards. However, the EFTA-Mexico language differs from EFTA-Bulgaria in stating that “A Party shall, *ex officio*, if its legislation so permits, or at the request of an interested party, refuse or invalidate the registration of a trademark which contains or consists of a geographical indication with respect to services not originating in or connected to the territory indicated, if use of the indication in the trademark for such services in that Party is of such a nature so as to mislead the public as to the true place of origin.”
Swiss-EU Agricultural Agreement

The Agreement on trade in agricultural products between Switzerland and the European Union was signed in June 1999, and entered into force in June 2002. According to the Joint Declaration on the protection of geographical indications and designations of origin of agricultural products and foodstuffs (Appendix D), the Parties will provide for the incorporation of provisions on the mutual protection of protected Denominations of Origin (PDOs) and protected geographical indicators (PGIs).

In July 2003, Switzerland and the European Union established of a working group on the protection of geographical indications. Work on mutual protection provisions awaits the full application of Article 17 (simplified procedure) of Regulation (EEC) No 2081/92. Meanwhile, the European Union proposed that a Working Group be set up, on an exploratory basis, for the purposes of: the mutual protection of PDOs and PGIs; the consideration of all related matters; and the exchange of the information required to implement this protection. Also, two working groups were formed, one for wines and the other for distilled spirits.

EFTA-Singapore

The agreement was signed in June of 2003. Article 1 of Annex XII, titled definition and scope of protection, goes beyond previous agreements in clarifying that “Appellations of origin are understood to be one form of geographical indications”. Paragraph 1 of Article 5 in Annex XXI, on the issue of geographical indications, affirms the same principles as Article 3 of Annex X of EFTA-Bulgaria; however, paragraph 2 further states that “the Parties may provide different legal means in accordance to the TRIPS Agreement to
prevent the misleading use of geographical indications in relation to services than that provided for the protection of geographical indications for products and shall be deemed to be in full compliance with the obligations under paragraph 1.”

**EFTA-Chile**

The agreement was signed in June 2003. This agreement uses the same definition of intellectual property rights as previous agreements, such as EFTA-Bulgaria. However, Article 6 of Annex XII, on geographical indications, reaffirms the commitment of the parties to ensuring protection in accordance with Articles 22, 23 and 24 of the TRIPS Agreement. The EFTA-Tunisia FTA, signed in December of 2004, includes similar provisions.

**EFTA-Lebanon**

The agreement was signed in June 2004. This agreement uses similar language on intellectual property rights as previous agreements, such as EFTA-Bulgaria. However, Article 6 of Annex XII, on geographical indications, also affirms “Lebanon shall make every effort to protect geographical indications with regard to all services.”
Appendix D

Preferential Trade Agreements and Foreign Direct Investment: Selected Literature

The connection between trade and foreign direct investment (FDI) has been widely studied in the last two decades.¹ To cite some examples, Lipsey and Blomström (1987) examined the relation between US and Swedish FDI and trade, while Blomström and Kokko (1997) and Dunning (1997, 2000) published articles with a comparative perspective. Brainard (1997) has offered methodological contributions.² Recent empirical studies by Hejazi and Safarian (1999) and Graham and Wada (in Graham 2000) find complementary relationships between exports and the stock of outward foreign direct investment.³

Within this general topic, the relationship between preferential trade agreements (PTAs, an umbrella term that includes FTAs), trade volumes, and FDI has attracted attention in policy circles. Theoretical analysis has been inconclusive, because arguments can be advanced for both positive and negative relations between trade and FDI. In principle, the impact of trade liberalization on FDI depend crucially on whether FDI is a substitute or complement to trade. In this appendix, we report the results of selected gravity models. The numerical coefficients are summarized in table D.1. Many studies find a positive relation between PTAs and the inward stock of FDI, both for PTA partners and for third

¹ Earlier studies exist, but they were not based on gravity models.
² For example, Brainard contends that it makes more sense to examine foreign production by multinational enterprises rather than FDI.
³ Dunning (1993) and Safarian and Hejazi (1999 and 2001) review the empirical literature.
countries. Perhaps the most skeptical comment comes from the US International Trade Commission (USITC 2005) which concludes, “The investment provisions of the covered FTAs are not expected to yield large changes in total foreign direct investment between the United States and its FTA partners”.

A. Studies Covering All Countries

Using a data set that reflects the experience of 20 FDI source countries (OECD members) investing in 60 host countries from 1982 through 1999, Levy-Yeyati, Stein, and Daude (2003) find that, when countries join an FTA, on average the bilateral FDI stock between the members increases by about 24 percent. The size of the “extended market” of the host country (i.e., adding the GDP figures for the FTA partners) has a positive effect on the bilateral FDI stock attracted from the source country. The elasticity of the bilateral FDI stock with respect to the size of the “extended market” of the host country is about 0.1.

Adams, Dee, Gali, and Mc Guire (2003) examined a sample of 116 countries over the period 1988-97. They create dummies to capture separately the effect of “traditional market access” provisions and “third wave provisions” (investment, government procurement, services, etc.). They also create dummies to separate the effect of inward FDI stock from PTA partners and from third countries (see table D.1). They find that market access provisions are not statistically significant, but that third wave provisions are significant, for both FDI stocks from within the PTA and from outside the area. For

---

4 The USITC also concludes that: “in specific sectors, however, the covered FTAs may generate new outbound U.S. investment.”
example, the third wave provisions of NAFTA are correlated with a 10 percent decrease in intra-regional FDI, but an almost 5 percent increase in inward FDI stock from external countries. Third wave provisions in the European Union are associated with a 3 percent increase in inward FDI stock from external countries; the effect of MERCOSUR is much larger, a 32 percent increase. However, EFTA is associated with a 41 percent decrease in inward FDI stock from external countries, (perhaps because non-EFTA investors chose the EU rather than EFTA).

Jaumotte (2004) reports on a sample of 71 developing countries over the period 1980-1999, mostly South-South integration initiatives. She finds that a 1.0 percent increase in the regional market size (i.e., adding the markets of both partners) is correlated with 0.4 percent increase in the stock of FDI in each party to the agreement. The result reflects a more general finding about FDI, namely that it favors large markets, measured by GDP (see, for example, Graham 2000).

B. Studies Covering NAFTA Partners

Globerman and Shapiro (1999) evaluate Canadian FDI using annual data for FDI stock (book value) and disaggregated by sector, over the period 1950-1995. They find that the CUSFTA/NAFTA dummy variable is correlated with greater Canadian outward direct investment in all sectors (manufacturing, services, and energy). The authors also
conclude that the CUSFTA/NAFTA was not associated with net foreign investment in Canada, although they highlight a trade-induced increase in FDI in manufacturing.\textsuperscript{5}

Hejazi and Safarian (2002) indicate that “NAFTA has resulted in reduced Canadian inward FDI and increased Canadian outward FDI, both to the United States and especially beyond.” They find that the NAFTA dummy variable is correlated with a 17 percent decrease in inward FDI stock to Canada and an almost 34 percent increase in Canadian outward FDI stock.

By contrast, Buckley, Clegg, Forsans and Reilly (2005) find that “the introduction of the free trade agreements between Canada and the USA increased the responsiveness of US investors to growth in the Canadian economy by a factor of two.” In a 2000 working paper, the same authors found that an increase in a compound variable that measures both the size of the US GDP and the existence (or not) of a free trade agreement between Canada and the United States is correlated with a larger non-NAFTA partner FDI stocks placed in Canada. For example, a 1.0 percent increase in the compound variable is associated with a 0.04 percent increase in the French FDI stock placed in Canada and a 0.01 percent increase in the US stock.

\textsuperscript{5} The authors however do not conclude that CUSFTA/NAFTA caused a net outflow of capital, since, “The direct investment data for Canada indicate that (in the post-1989 period) Canadian outward direct investment increased especially for destinations other than the United States.” Among other forces, they point to integration in the European Union as a “pull-factor”.
Hallward-Driemeier (2003) examined the relationship between bilateral investment treaties (BITS) and FDI flows. Her data set covers bilateral outflows from 20 OECD countries to 31 developing countries during the period 1980 to 2000. She finds a non-significant negative correlation between BITS and flows. Interestingly, however, she found that NAFTA did increase FDI flows to Mexico. The NAFTA dummy is correlated with an increase in the level of FDI flows from OECD countries into Mexico.

C. Exports and FDI: Complements not Substitutes

Finally, it is worth reporting the analysis by Graham and Wada (in Graham 2000) of the connection between US exports and US FDI stocks placed in host countries with different income levels. Among other host countries, they examined the experience of some 19 high-income countries over the period 1983 to 1996. They found that US FDI and US exports complement one another: on average, a 1.0 percent increase in the US outward FDI stock was associated with a 0.6 percent increase in US manufactured exports to the host country.

Hejazi and Safarian (1999) also confirm the complementary relationship between exports and FDI for Canada. They found that a 1.0 percent increase in the Canadian outward FDI stock was correlated with a 0.7 percent increase in Canadian exports. They also find that

---

6 Dee and Gali (2003) reach the same conclusion in their analysis of the relationship between BITS and FDI.
higher levels of inward FDI stock increase imports into Canada (but that the size of the import associations is only one-third the size of the export association).\textsuperscript{7} 

\textsuperscript{7} The study also analyzes the relationship at sector level. They authors find that the relationship between exports and the outward FDI stock is positive for 9 sectors and negative for 4 sectors.
Table D.1 Relationship Between PTAs, FDI and Exports

PTAs and FDI: Studies Covering All Countries

Dependent Variable: LN (Inward FDI Stock_{ij})
Selected Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>ASEAN</th>
<th>APEC</th>
<th>EFTA</th>
<th>EU</th>
<th>NAFTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRTA _ij \textsuperscript{a}</td>
<td>5.77</td>
<td>-1.11</td>
<td>0.05</td>
<td>-0.69</td>
<td>na</td>
</tr>
<tr>
<td>3wave _ij \textsuperscript{b}</td>
<td>-9.65</td>
<td>0.71 ***</td>
<td>30.77 *</td>
<td>0.05</td>
<td>-10.11 **</td>
</tr>
<tr>
<td>MRTA _ij \textsuperscript{a}</td>
<td>-0.02</td>
<td>0.04</td>
<td>1.15</td>
<td>0.37</td>
<td>-2.60</td>
</tr>
<tr>
<td>3wave _ij \textsuperscript{b}</td>
<td>4.05</td>
<td>0.68 ***</td>
<td>-41.56 ***</td>
<td>3.18 **</td>
<td>4.9 ***</td>
</tr>
</tbody>
</table>

Levy-Yeyati, Stein and Daude (2003)
Dependent Variable: LN (Inward FDI Stock_{ij} +1)
Selected Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LN (EM_{i}) \textsuperscript{c}</td>
<td>0.10 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN (EM_{j}) \textsuperscript{d}</td>
<td></td>
<td>-0.05 ***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same FTA _ij \textsuperscript{e}</td>
<td></td>
<td>0.24 ***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Jaumotte (2004)
Dependent Variable: LN (Inward FDI Stock_{ij})
Selected Independent Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LN (REGY) _i</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.40 **</td>
</tr>
</tbody>
</table>

Hallward-Driemeier (2003)
Dependent Variable: FDI inflows_{ij}
Selected Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NAFTA dummy:</td>
<td>256.31 **</td>
</tr>
</tbody>
</table>

PTAs and FDI: Studies Covering NAFTA Partners

Buckley, Clegg, Forsans and Reilly (2000)
Dependent Variable: LN (Inward Canadian FDI Stock from UK, France and US)
Selected Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>UK</th>
<th>France</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN (USGDP*FTAdummy)</td>
<td>0.01 **</td>
<td>0.04 **</td>
<td>0.01 **</td>
</tr>
</tbody>
</table>
Globerman and Shapiro (1999)
Dependent Variable: FDI Stock in Canada
Selected Independent Variables

<table>
<thead>
<tr>
<th>Inward</th>
<th>Outward</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTA/NAFTA dummy</td>
<td>1676.8 ***</td>
</tr>
<tr>
<td>Mfg</td>
<td>Services</td>
</tr>
<tr>
<td>-16.4</td>
<td>-380.6 ***</td>
</tr>
</tbody>
</table>

Hejazi and Safarian (2002)
Dependent Variable: LN (Inward Canadian FDI Stock _i_j)
Selected Independent Variables
NAFTA dummy: -0.17 *

Dependent Variable: LN (Outward FDI Stock from Canada _i_j)
Selected Independent Variables
NAFTA dummy: 0.34 **

Exports and FDI: Complements not Substitutes

Graham and Wada (Graham 2000)
Dependent Variable: LN (Outward US FDI Stock _i_j)
Selected Independent Variables

<table>
<thead>
<tr>
<th>Low Income</th>
<th>High Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN (Imports _i_j)</td>
<td>0.79 *</td>
</tr>
<tr>
<td>LN (Exports _i_j)</td>
<td>1.3 *</td>
</tr>
</tbody>
</table>

Hejazi and Safarian (1999)g
Dependent Variable: LN (Canadian Imports _i_j)
Selected Independent Variable
LN (Inward Canadian FI) 0.02

Dependent Variable: LN (Exports _i_j)
Selected Independent Variables
LN (Outward Canadian FJ) 0.07 ***

Notes
*** denotes the significance at the 1% level; ** denotes the significance at the 5% level; and * denotes the significance at the 10% level.
a. MRTA: is an index capturing the merchandise trade provisions of a PTA, that takes the value of the Member Liberalization Index (MLI) if both countries i and j belong to the same PTA and otherwise MRTAij* means that country J* does not belong to the PTA.
b. 3wave is an index capturing the ‘new age’ provisions of a PTA, that takes the value of the non-merchandise MLI if both countries i and j belong to the same PTA and 0 otherwise. 3waveij* means that country J* does not belong to the PTA.

c. EMit is the logarithm of the joint GDP of all the countries to which the host has tariff-free access due to common membership in an FTA (includes the host’s own GDP as well).
d. EMjl is the logarithm of the joint GDP of the source country plus all the countries that are FTA partners of the source country.
e. Same FTA is a dummy that takes a value of 1 when the source and the host countries belong to the same free trade area.
f. REGY denotes the market size extended to include the regional market size for all countries belonging to a regional trade agreement.
g. Hejazi and Safarian (1999) also model the relationship at sectoral level for 14 sectors of the Canadian economy.
Appendix E

Technical Aspects of the Gravity and CGE Models

8.1 Aspects of the Gravity Model

A. Data set construction

As mentioned in Chapter 8, the gravity model analysis underlying this study is based on a data set specially constructed by joining the elements of two large data sets developed by other researchers. The first of these is the extensive gravity model data set developed by Andrew Rose (2004). The Rose data set covers aggregate bilateral merchandise trade between 178 countries from 1948 to 1999 (with gaps and excluding Taiwan and some centrally planned economies), compiled from IMF Directions of Trade Statistics. The bilateral trade figures in the Rose data set are averages of FOB export and CIF import data in US dollars, deflated by the US consumer price index.

The Rose data set also includes the "core" and RTA explanatory variables discussed in Chapter 8 and identified in tables 8.1 and 8.2. The core explanatory variables are drawn from several standard sources, including the CIA World Factbook, IMF International Financial Statistics, Penn World Table, and World Bank World Development Indicators.

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1 The Swiss-US trade integration and openness variables were compiled for the present study and added to the data set by the authors.
To provide the Rose gravity model and data set with somewhat greater "analytical depth," the Rose data set was concorded with bilateral merchandise trade data at the 1-digit SITC level, taken from the highly disaggregated bilateral trade data set compiled by Feenstra and Lipsey (2005). The Feenstra-Lipsey data set covers bilateral trade data for 1962-2000, organized by 4-digit SITC (revision 2) categories. In contrast to the Rose trade data, world trade flows in the Feenstra-Lipsey data set are drawn from United Nations (UN) data sources and are based primarily on reporter country import data (supplemented as possible where import data gaps occur by reporter country export data). The Feenstra-Lipsey data set covers a somewhat smaller number of trading countries than the Rose data set, especially during the period 1984-2000, when bilateral trade of only 72 countries is represented in the data set (but still accounting for 98 percent of world exports during 1996-2000).

For the present study, the Feenstra-Lipsey world trade data were aggregated to the 1-digit SITC level by country pairs and deflated by the US consumer price index (1983=100). After transforming these real trade flows to natural log-terms, they were finally integrated with the Rose data using a concordance between the UN (Feenstra-Lipsey) country codes and the IMF (Rose) country codes. In the process, account was taken for all reported adjustments to the UN trade data by Feenstra and Lipsey, except the estimated redistribution of value-added in trade between China and Hong Kong, separately reported in Feenstra and Lipsey (2005). Lost in the process, however, were disaggregated trade flows for the former Soviet bloc countries, some less developed countries, and Taiwan,
for which no UN (Feenstra-Lipsey) or IMF (Rose) country codes were available. The separate UN country codes for former West Germany and present-day Germany were merged in the Feenstra-Lipsey data set before integrating the two data sets, thus preserving pre-1991 observations on the bilateral disaggregated trade of West Germany (including with Switzerland). Appendix Table E.1 provides a description of the regression variables included in the combined Feenstra-Lipsey and Rose data set.

B. Estimating techniques

As might be expected, the estimation of gravity models using cross-sectional time-series data presents some complex and difficult problems in econometric methodology (Egger 2002, Hsiao 2003). Essentially, ordinary least squares (OLS) regression is unsatisfactory because it does not admit possible unobserved effects related to the combinations of commodities and pairs of trading countries in the data set. As a consequence, the analysis reported in Chapter 8 utilizes a random-effects variant of the gravity model, using generalized least squares (GLS) as the estimating technique. For a discussion of the application of the GLS technique to a random-effects regression model, see Hsiao (2003). An important assumption of the random-effects approach, embodied in the estimation results reported in Chapter 8, is that the unobservable random-effects variable is uncorrelated with the observed explanatory variables included in the regression equation.

C. Reservations about the APC results

Adams et al. (2003), colleagues at the Australia Productivity Commission (APC), report negative RTA coefficients, using an analytic framework in the spirit of the gravity model
and a database that ends in 1997. Indeed, these authors at the claim to find net trade
diversion for 12 out of 16 recent PTAs. The 12 PTAs for which the authors claim net
trade diversion (see their table 4.3) include: AFTA, EFTA, EC/EU, Mercosur, NAFTA,
CER, EU-Switzerland, Chile-Colombia, Australia-PNG, Chile-Mercosur, EU-Egypt, and
EU-Poland. The 4 PTAs for which the authors claim net trade creation are: Andean Pact,
LAFTA/LAIA, US-Israel, and SPARTECA.

For several reasons, we do not subscribe to the APC findings. To begin with, their
technique for measuring net trade diversion is poorly explained or justified in the paper.
The APC authors add up their three RTA coefficients in a different manner (and often get
a different sign) than the methodological predecessor paper authored by Soloaga and
Winters (2001). The text description of the variables does not match up with the tables.
Nowhere in the APC paper is there a simple table showing the amount of trade created
between RTA members and diverted from non-members; we believe such a table might
cast considerable doubt on the estimated coefficients. Instead of deleting zero-trade
observations from the database (the customary procedure), the authors represent them in
a curious manner in the regression analysis, and this could bias the estimated coefficients.
The “dynamic” gravity model used by the APC authors – adding a time dimension to
annual observations – is not, to us, a persuasive alternative to the customary before-RTA
and after-RTA analysis.

8.2 Aspects of the Computable General Equilibrium Model
A. Overview

As mentioned in Chapter 8, our CGE model is the GTAP framework, a publicly available model that is widely adopted. The GTAP model is a multi-region, multi-sector model that assumes perfect competition and constant returns to scale. Bilateral trade is handled via the Armington assumption, which treats goods from alternative sources as imperfect substitutes. Import demand functions are separated by agent (sometimes called the Salter specification). Production conditions are modeled using “nested” constant elasticity of substitution (CES) functions, and intermediate goods are used in fixed proportions. Representative household demand takes into account changes in demand structures as incomes rise. These and other aspects of the GTAP model are fully documented in Hertel (1997) and the GTAP website at www.gtap.org. Recent surveys of the application of CGE models to regional trade negotiations include Scollay and Gilbert (2000), Scollay and Gilbert (2001) Gilbert and Wahl (2002), Robinson and Thierfelder (2002) and Lloyd and MacLaren (2004).

B. Base data

The base data for the simulations is drawn from the GTAP6 database (final release), the most complete dataset available. It represents the world economy as at 2001. The database contains IO representations of individual economies, obtained from national statistical agencies, international trade and income data from the UN COMTRADE.
database and the World Bank, respectively. The GTAP6 database improves significantly on GTAP5 by incorporating new protection data from the AMAD and MACMAPS databases. The latter feature bilateral tariffs, so regional trading agreements in place at 2001 are fully integrated. Full database documentation can be found in Dimaranan and McDougall (2002).

C. Aggregation strategy

While the GTAP6 database features 87 regions and 57 sectors, it must be aggregated for reasons of computational efficiency. The aggregation strategy we have chosen is given in Table E.2. The approach taken was to rank the total exports of the United States and Switzerland, and the bilateral exports of the two countries, and then use this ranking, along with “natural” sectoral groupings to aggregate the data. A similar approach was followed for regional aggregation, where care was also taken to include current US partners within NAFTA, and also new and prospective FTA partners (Chile, Australia, Singapore, Morocco, CAFTA, SACU, and Thailand).

D. Data adjustments

While agricultural protection data in GTAP6 is excellent, services protection data is limited. Dee et al. (2000) have published their estimates of barriers to services trade, at the aggregate level. In this study, we split services into traded and non-traded categories, following the classification adopted by Dee et al. (2000), and use the estimates of services barriers from that study. These barriers are implemented using several instruments (import tax equivalents, export tax equivalents, taxes on output and taxes on
domestic capital). The various tax rates were imposed on the GTAP6 data set prior to the major simulation using the ALTERNATEX procedure. This procedure fixes the current account balance and uses parameters such that all key shares in the model remain constant when the new taxes are imposed, while ensuring that the database remains consistent.

An important data adjustment with respect to the Swiss ad valorem equivalent (AVE) tariff on imports of “other manufactures” requires mention. “Other manufactures” is a GTAP6 basket category that includes all manufactures except motor vehicles, machinery and electronic equipment). The GTAP6 data set records the Swiss AVE tariff on this category as 155 percent, an implausible figure that is not supported by the detailed tariff information presented in Chapter 4. Based on the UNCTAD data summarized in table E.3, we have assumed that the Swiss tariff barrier for the “other manufactures” category is 11 percent, although even that figure might be exaggerated.\(^7\) The figure of 11 percent is calculated by giving a two-thirds weight to the simple average Swiss tariff (6.1 percent) on all US HS-4 manufacture categories where US exports are over $10 million, and a one-third weight to the Swiss average tariff (21.1 percent) on those HS-4 manufactured exports where the Swiss tariff exceeds 5 percent.

---

\(^7\) Detailed comparisons of UNCTAD and WTO AVE tariff figures for Switzerland (for example, as reported in the notes to table 4.4) suggest that UNCTAD figures are often too high. The problem in evaluating Swiss tariffs arises because many duties are specific, and different methodologies are used to compute their ad valorem equivalents.
<table>
<thead>
<tr>
<th>Regression Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Log value of bilateral trade by 1-digit SITC, real US dollars</td>
</tr>
<tr>
<td>Distance</td>
<td>Log of distance</td>
</tr>
<tr>
<td>GDP</td>
<td>Log of product of real GDPs</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>Log of product of real GDPs per capita</td>
</tr>
<tr>
<td>Common language</td>
<td>Common language dummy</td>
</tr>
<tr>
<td>Common border</td>
<td>Land border dummy</td>
</tr>
<tr>
<td>Landlocked</td>
<td>Number of countries landlocked (0/1/2)</td>
</tr>
<tr>
<td>Island</td>
<td>Number of island countries (0/1/2)</td>
</tr>
<tr>
<td>Land area</td>
<td>Log of product of land areas</td>
</tr>
<tr>
<td>Common colonizer</td>
<td>Dummy for common colonizer post 1945</td>
</tr>
<tr>
<td>Colony</td>
<td>Dummy for country pairs currently in colonial relationship</td>
</tr>
<tr>
<td>Ever a colony</td>
<td>Dummy for country pairs ever in colonial relationship</td>
</tr>
<tr>
<td>Common country</td>
<td>Dummy for same nation/perennial colonies</td>
</tr>
<tr>
<td>Currency union</td>
<td>Strict currency union dummy</td>
</tr>
<tr>
<td>GSP</td>
<td>GSP dummy</td>
</tr>
<tr>
<td>RTAs</td>
<td>RTA dummy covering 10 regional trading arrangements</td>
</tr>
<tr>
<td>Swiss-US trade</td>
<td>Dummy for Swiss-US trade</td>
</tr>
<tr>
<td>US openness</td>
<td>Dummy for US trade with all partners</td>
</tr>
<tr>
<td>Swiss openness</td>
<td>Dummy for Swiss trade with all partners</td>
</tr>
</tbody>
</table>

Notes: Dependent variable based on bilateral trade flows drawn from the Feenstra-Lipsey data set. Swiss-US trade and openness variables constructed by the authors. All other variables drawn directly from Rose data set. RTA variable covers the Association of Southeast Asian Nations (ASEAN), European Union (EU), US-Israel FTA, NAFTA (North America Free Trade Agreement), Caribbean Community (CARICOM), Agreement on Trade and Commercial Relations between the Government of Australia and the Government of Papua New Guinea (PATCRA), Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA), Central American Common Market (CACM), South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA), and Common Market of the South (Mercosur).

Sources: Rose (2004), Feenstra-Lipsey (2005), and authors’ calculations.
<table>
<thead>
<tr>
<th>Sectoral Aggregation</th>
<th>Regional Aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>Australia</td>
</tr>
<tr>
<td>Oil Seeds</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Plant Based Fibers</td>
<td>China</td>
</tr>
<tr>
<td>Other Crops</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>Raw Animal Products</td>
<td>Japan</td>
</tr>
<tr>
<td>Wool</td>
<td>Republic of Korea</td>
</tr>
<tr>
<td>Forestry</td>
<td>Taiwan</td>
</tr>
<tr>
<td>Coal, Oil and Gas</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Dairy Products</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Other Food Products</td>
<td>Philippines</td>
</tr>
<tr>
<td>Textiles and Wearing Apparel</td>
<td>Singapore</td>
</tr>
<tr>
<td>Wood Products</td>
<td>Thailand</td>
</tr>
<tr>
<td>Paper Products</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Chemicals</td>
<td>Canada</td>
</tr>
<tr>
<td>Ferrous Metals</td>
<td>United States of America</td>
</tr>
<tr>
<td>Non-ferrous Metals</td>
<td>Mexico</td>
</tr>
<tr>
<td>Metal Products</td>
<td>Brazil</td>
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<tr>
<td>Motor Vehicles</td>
<td>Chile</td>
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<tr>
<td>Electronic Equipment</td>
<td>Rest of South America</td>
</tr>
<tr>
<td>Machinery and Equipment</td>
<td>Central America</td>
</tr>
<tr>
<td>Other Manufactures</td>
<td>European Union</td>
</tr>
<tr>
<td>Non-traded Services</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Traded Services</td>
<td>Rest of EFTA</td>
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<tr>
<td></td>
<td>Eastern Europe</td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
</tr>
<tr>
<td></td>
<td>SACU</td>
</tr>
<tr>
<td></td>
<td>Rest of World</td>
</tr>
</tbody>
</table>
### Table E.3 High Swiss Tariffs on Selected US Manufactured Exports
(4-digit level headings facing average applied tariffs exceeding 5 percent)

<table>
<thead>
<tr>
<th>Heading (HS-4)</th>
<th>Tariff Item</th>
<th>Avg Swiss Tariff lines &gt; 5% (2001)</th>
<th>US Exports 2004 (millions $)</th>
<th>Swiss Tariff lines &gt; 5% Switz.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7318</td>
<td>Screws, bolts, nuts, hooks, and similar articles, of iron or steel</td>
<td>75.2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>8526</td>
<td>Radar, radio navigational aid, and remote control apparatus</td>
<td>48.6</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>2403</td>
<td>Tobacco and substitute manufactures; extracts and essences</td>
<td>29.1</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>8708</td>
<td>Parts and accessories motor vehicles of various purposes</td>
<td>28.0</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4911</td>
<td>Printed matter nesoif, including printed pictures and photographs</td>
<td>24.1</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>8529</td>
<td>Parts for television, radio and radar apparatus</td>
<td>22.6</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>8524</td>
<td>Records, tapes and other recorded media</td>
<td>20.1</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>3917</td>
<td>Tubes, pipes and hoses, and fittings, of plastics</td>
<td>18.4</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>3307</td>
<td>Beauty or make-up and skin-care preparations</td>
<td>17.1</td>
<td>36</td>
<td></td>
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<tr>
<td>8504</td>
<td>Electrical transformers and power supplies for adp machines</td>
<td>15.8</td>
<td>22</td>
<td></td>
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<tr>
<td>8483</td>
<td>Transmission, gears, clutches, and other auto parts</td>
<td>15.7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>8501</td>
<td>Electric motors and generators (excluding generating sets)</td>
<td>14.2</td>
<td>10</td>
<td></td>
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<tr>
<td>8409</td>
<td>Parts for spark-ignition or internal combustion piston engines</td>
<td>12.3</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>8481</td>
<td>Taps, cocks, valves and similar appliances for pipes</td>
<td>12.2</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>7307</td>
<td>Tube or pipe fittings of iron or steel</td>
<td>8.5</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>3824</td>
<td>Binders for foundry molds or cores</td>
<td>6.5</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>8413</td>
<td>Pumps for liquids, liquid elevators and parts</td>
<td>6.4</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>8421</td>
<td>Filtering or purifying machinery and apparatus and parts</td>
<td>5.3</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal for High Tariff HS-4 Manufactured Exports</strong></td>
<td><strong>21.1</strong></td>
<td><strong>176</strong></td>
<td><strong>565</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total HS-4 Manufactured Exports over $10 million</strong></td>
<td><strong>6.1</strong></td>
<td><strong>205</strong></td>
<td><strong>8,306</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

a. Values reported correspond to averages of *ad valorem* equivalents for non *ad valorem* tariffs. All entries in the Swiss tariff schedule are non *ad valorem*.

b. Simple average of all observations in that column.

c. Simple average of tariffs for US HS-4 exports to Switzerland exceeding $10 million. By comparison, in 2004, the simple average swiss MFN tariff for non-agricultural products (WTO definition) was 2.3%.

**Sources:** USITC (2005) and UNCTAD (2005).
THE SHAPE OF A FREE TRADE AGREEMENT BETWEEN SWITZERLAND AND THE UNITED STATES

REFERENCES


United States Relationship in the Context of Free Trade. *International Finance* 0507002. [http://ideas.repec.org/e/pre23.html](http://ideas.repec.org/e/pre23.html)


