Institute for International Economic Policy Working Paper Series Elliott School of International Affairs The George Washington University

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IIEP-WP-2011-23

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January 2011

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JEL Codes: F13, F15, C71, C72. JEL Keywords: Trade Policy; Economic Integration Cooperative and Non-cooperative Games.

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ABSTRACT

As the trade negotiations within the FTAA region become more complicated with many more options for both the United States and its Latin American partners, it becomes more difficult to determine the prime motivation for any of the partners. Some have argued that the US negotiating process can be best described as having multiple tracks. The first and primary track is a commitment to a reduction in average tariffs. The second track consists in sector or issue specific agreements which can not be easily concluded in a regional tariff reduction exercise.

In order to simplify and manage the theoretical construct for this complicated bargaining process, this paper develops a sequential bargaining game framework and applies it to US-Latin American trade negotiations. Within this process, the US representing the offering party has multiple recipients. Not all recipients will simultaneously accept a sector or issue specific agreement. Consequently, the search for partners which may appear as a random walk is in reality a sequential probe for an agreeable partner starting with the WTO shifting to a regional FTAA then digressing to a sub-regional CAFTA and finally to a group of bilateral agreements. While a multilateral agreement within the confines of the WTO may appear to be the best solution, at first blush, a Hemisphere wide FTA may turn out to be the first best outcome, especially given the activities of the Europeans in the WTO.

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I. INTRODUCTION AND BACKGROUND

The first "Summit of the Americas" held in Miami in 1994, is considered to be the official initiation of the thirty-four Western Hemisphere¹ country negotiations designed to establish a Free Trade of the America's (FTAA).² Since 1994, there have been five summits³ and eight trade ministerial meetings.⁴ The first draft of the FTAA was adopted at the Quebec

It is worth noting that when the FTAA comes into being it would represent a consumer base of nearly 800 million people. This population would be more than twice the 375 million of the now 15-nation European Union. See, at http://www.ftaa-alca.org/ministerials. (official website of the FTAA).

The current state of negotiations is presented at: <u>http://www.ftaa-alca.org/view_e.asp</u>.

³ The first meeting was held in Miami in 1994; the second in Santiago, Chile in 1998; the third in Quebec, Canada in 2001; the fourth in Monterrey, Mexico in 2004 and the fifth in Mar Del Plata, Argentina 2005.

¹ The countries involved in the negotiations include: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Vincent and the Grenadines, St. Lucia, St. Kitts and Nevis, Suriname, Trinidad and Tobago, Uruguay, the United States of America, and Venezuela. Note that the list excludes Cuba.

² Under the Declaration of Principles ("Declaration"), these countries committed themselves to "begin immediately" the construction of the free trade area and to complete negotiations no later than the year 2005. The Declaration stated that concrete progress toward the FTAA would occur before the year 2000. The Declaration further called for building on "existing sub-regional and bilateral arrangements in order to broaden and deepen hemispheric economic integration and to bring the agreements together." At the same time, the Declaration recognized the need to "remain cognizant" of the "wide differences in the levels of development and size of economies" in the Hemisphere in moving toward tighter economic integration.

⁴ The first meeting was held in Denver in June 1995; the second in Cartagena, Colombia in March 1996; the third in Belo Horizonte, Brazil in May 1997; the fourth in San Jose, Costa Rica in March 1998; the fifth in Toronto, Canada in November 1999, the sixth in Argentina from April 6-7, 2001, the seventh in Quito, Ecuador from November 1-2, 2002, and the eight in Miami November 17-21, 2003.

The San Jose Declaration contains General Principles for the Negotiations, as well as General and Specific Objectives. The Ministers agreed that the FTAA should improve upon WTO rules and disciplines wherever possible and appropriate. In so doing, the negotiators hoped that they can develop a single hemispheric trade norm in places where the most serious trade barriers in the region still exist. It was agreed that bilateral and sub-regional agreements

City Summit in 2001 and a second draft was completed at the Quito ministerial in November 2002. At that time, Brazil and the United States became co-chairs of the Trade Negotiations Committee (TNC) and were charged with guiding the negotiating process to its completion.⁵ The third draft agreement was completed at the Eighth Trade Ministerial meeting at Miami in November 2003.

At the seventh ministerial meeting in Quito, trade ministers reaffirmed their commitment to a schedule of negotiations involving services, investment, government procurement, and agriculture and nonagricultural market access. Under the agreed upon time frame, initial offers would be tabled between December 15, 2002 and February 15, 2002. The ministers also agreed to launch a Hemispheric Cooperation Program that would provide technical assistance to developing countries to help them take advantage of the FTAA negotiations. Without concluding an agricultural agreement, the ministerial declaration, stated that FTAA negotiations must "take account the practices by third countries that distort trade in agricultural products." This language reflected U.S. concerns that the whole issue of reductions of agricultural support should be discussed in the wider WTO framework, where European Union agricultural subsidies would also be under scrutiny. The declaration did, however, make it clear that the other negotiating countries would withhold their tariff cutting offers in agriculture until the United States agreed to cut its subsidies and domestic support programs. 19 ITR 1915, 11/7/02 and 19 ITR 1916, 11/7/02.

such as NAFTA and Mercosur can coexist with the FTAA only to the extent that the rights and obligations under those agreements are not covered or go beyond those of the FTAA. It was also agreed that the negotiations will be a "single undertaking," in the sense that signatories to the final FTAA Agreement will have to accept all parts of it. 16 ITR 103, 1/20/99.

The sixth ministerial meeting, held April 6-7, 2001 in Buenos Aires, established a more precise time frame for conclusion and entry into force of the FTAA agreement. These deadlines, which included the provisions that the FTAA countries must agree on how to conduct the market-opening portion of the talks by April 1, 2002; start tariff negotiations no later than May 15, 2002; and produce an agreement that should enter into force no later than December 2005, were approved by 33 Heads of State at the Quebec City Summit. Only Venezuela declined to endorse the timeline, arguing that the leaders' declaration as worded did not reflect the process under its national laws for ratifying the agreement. The leaders also added a new pledge that only democracies would be able to participate in the trade bloc and agreed to make public the preliminary negotiated texts. 18 ITR 1106, 7/12/01 and 18 ITR 1044.

⁵ Canada was designated as the Chair of the overall negotiating process for the initial 18 months (May 1, 1998-Oct. 31, 1999) and the United States and Brazil were named co-chairs during the final two years of the negotiations (November 1, 2002-December 31, 2004). On November 20, 2003 the Miami meetings were called to an end, without much of a success but at least avoiding a complete failure. One clear player, the US, walked away from the meetings still attempting to push on with bilateral accords. 20 ITR 1960, 11/27/03.

The FTAA is traditionally viewed as an integral component of Latin America's exportled development strategy. The experience of Mexico's participation in the North American Free Trade Agreement (NAFTA) has not gone unnoticed.⁶ The resulting argument in favor of the FTAA is therefore closely related to three popular rationales. First, there is increased intraregional trade within Latin America. Latin America's trade has grown faster than the world average over the last decade. While agriculture and other primary products are important, diversification into light manufacturing has been a direct result of closer trade and investment ties with the U.S. market. The increased bilateral trade with the U.S. market is thus the second major justification for the FTAA. Finally the FTAA raises expectations that it will promote trade diversification with the help of foreign investment.⁷

Unlike the traditional FTAs of the 1980s that relied predominantly on bilateral tariff reductions, the current batch of FTAs are more comprehensive in scope, covering trade in all goods and services, investment rules, and intellectual property rights, among many other issues.⁸

⁶ NAFTA has fostered an export-led manufacturing boom that changed Mexico's trade and industrial profile. During the 1980s Mexico's exports depended almost exclusively on foreign petroleum sales. By 2001, 89% of Mexican exports were manufactured goods. Mexico's top trade partners (in percent) in 2002 were:

Export destinations		Import origins	
US	77.0	US	63.6
Canada	5.0	Germany	3.3
Japan	1.0	Japan	2.5
Spain	0.8	Canada	1.9
Source: Economist Intelligence Unit.			

With respect to the FTAA, the U.S. traded \$686 billion worth of goods with the FTAA countries in 2002: \$274.5 billion in exports and \$411.5 billion in imports. See USITC, Online Trade Data Web. http://dataweb.usitc.gov/scripts/Regions.asp

⁷ See, Inter-American Development Bank. *Beyond Borders: The New Regionalism in Latin America: Economic and Social Progress Report.* Washington, D.C. 2002; and Weintraub, Sidney. *Development and Democracy in the Southern Cone.* Center for Strategic and International Studies, Washington, D.C., February 2000.

⁸ Under Omnibus Trade and Competitiveness Act of 1988 (OTCA 1988), [P.L. 100-418 (102 Stat. 1107)] the President could implement certain trade agreements that affected only tariffs without congressional action. An agreement including non-tariff provisions, however, qualified for expedited consideration only if (1) it was

negotiated during a specified time period; (2) it advanced trade objectives established by Congress in law; (3) the implementing bill contained only provisions "necessary and proper" to implement the agreement; and (4) in the course of negotiations, the President notified and consulted with Congress in specified ways. Some of these consultations permitted the revenue committees to draft the implementing bill the President then submitted.

In recent years, the term "fast track" has most often been used with particular reference to the expedited procedures for bills to implement certain international trade agreements. These expedited procedures were first established by the Trade Act of 1974, [See P.L. 93-618 (88 Stat. 1978), as amended. The expedited procedures appear chiefly in Sections 151-152 (19 U.S.C. 2191, 2192)] then renewed by several subsequent laws, especially the Omnibus Trade and Competitiveness Act of 1988. Under these statutes, if a trade agreement proposes to do more than reduce tariffs in accordance with the President's reciprocal trade authority, it can enter into force only through enactment of a bill to implement it.

This "fast track" authority was used to negotiate and implement several bilateral and multilateral agreements, including agreements in the Tokyo Round of multilateral trade negotiations, the U.S.-Canada Free Trade Agreement (FTA), the North American Free Trade Agreement (NAFTA), and the Uruguay Round (UR) accords, which included establishment of the World Trade Organization (WTO). Under this authority the agreements would be considered promptly by Congress and not be subjected to changes that would force a return to the bargaining table. The current "fast track" authority was signed into law (P.L. 107-210) on August 6, 2002.

As one would expect such authority is supported by the export-oriented enterprises that have argued that foreign trading partners would not seriously negotiate with an Administration that lacked this kind of negotiating power. On the other hand, some farm groups along with the textile and apparel lobby have argued that fast track ultimately will lead to new agreements that have adverse effects on U.S. producers.

As a result of these fears, the current "fast track" authorization includes requirements for advance notification of Congress and consultations with relevant committees, before an agreement could be concluded. Congress has, in effect, used these consultative requirements as informal mark-ups to address, in advance, the various policy issues that otherwise might be debated during the votes on the implementing legislation. For example, the USTR is required, in the course of negotiations, to "consult closely and on a timely basis with, and keep fully apprized of the negotiations," all congressional committees with jurisdiction over affected laws – as well as with the new Congressional Oversight Group (to include the chairmen and ranking members of the two Agriculture Committees). This Group must receive regular, detailed briefings, have access to pertinent negotiating documents, and be accorded "the closest practicable coordination" throughout the negotiations. The House and Senate Agriculture Committees are singled out in the TPA law for close and timely consultations including immediately before an agreement is initialed by trade officials.

The principal agricultural negotiating objective is "to obtain competitive opportunities for U.S. agricultural commodities in foreign markets and to achieve fairer and more open conditions of trade in bulk, specialty crop, and value-added commodities by." This translates to the following laundry list: (a) reducing or eliminating, by a date certain, tariffs and other charges that decrease U.S. export opportunities, and reducing tariffs to levels that are at or below U.S. tariffs; (b) Reducing or eliminating subsidies that harm U.S. exports or unfairly distort markets; (c) allowing for the preservation of (non trade-distorting) programs that support family farms and rural communities; (d) developing disciplines for domestic farm support so that production in excess of domestic food security needs is sold at world prices, and eliminating policies that create price-depressing surpluses; (e) eliminating when possible state trading enterprises (STEs); (f) strengthening dispute settlement mechanisms in order to eliminate practices (including STE activities; "unjustified" labeling, sanitary and other technical barriers to trade; and restrictive administration of tariff rate quotas, or TROs) that impair U.S. market opportunities; (g) eliminating practices that adversely affect trade in perishable or cyclical products and addressing their trade problems; and ensuring that import relief mechanisms for such products are as accessible and useful to U.S. growers as they are to producers in other countries; (h) taking into account whether other countries have not lived up to existing trade agreements, and the impacts of such agreements on U.S. agriculture; (i) maintaining bona fide food assistance programs, and preserving U.S. market development and export credit programs; (j) recognizing the effect that simultaneous sets of negotiations may have on U.S. import-sensitive commodities (including those subject to TRQs). See The Trade and Development Act of 2000 (P.L. 106-200) for a complete list of Agricultural protections.

The FTAA agreement is in line with this kind of regional arrangements in that it is composed of a complicated set of agreements covering the following: market access; agriculture; investment; services; government procurement; intellectual property rights; subsidies, antidumping, and countervailing duties; competition policy; and dispute settlement. The level of comprehensiveness is one of the causes for the delay in adoption and is also the primary explanation for the differing shape of the mode of negotiation used by US trade negotiators, shifting from multilateral negotiations to regional negotiations and then to bilateral negotiations, depending on the nature of the stumbling bloc. Regional US trade policy appears to be shifting more in favor of a series of trade deals with individual countries.⁹

At the Miami meetings the main agenda items on the table, were US demands for safeguards on investments, intellectual property and government contracts and on the part of Brazil and Argentina demands on reducing US agricultural tariffs and subsidies. None of these demands were satisfied.¹⁰ The resulting Miami declaration contained language allowing countries to take on "different levels of commitments" but also called for FTAA provisions containing a "common and balanced set of rights and obligations" in all of the nine negotiating areas agreed to in previous discussions: market access; agriculture; government procurement; investment; competition policy; intellectual property; services; dispute settlement; and subsidies, dumping and countervailing duties. More importantly, it permits countries to opt out of

⁹ U.S. Trade Representative Robert B. Zoellick has repeatedly used the term "competitive liberalization" to describe U.S. trade strategy, and has said it consists of negotiations on the bilateral, regional, and multilateral levels. 20 ITR 1983, 12/04/2003.

¹⁰ The Brazilian demands included cuts in US domestic farm subsidies and changes in antidumping laws, which have been used to raise tariffs on Brazilian steel and citrus products. Brazil has refused US demands to boost opportunities and protections for international investors, including in government contracting. 20 ITR 1961, 11/27/03.

individual measures of a subsequent FTAA that they deem objectionable.¹¹ Furthermore, it encourages commitments to be agreed upon plurilaterally among groups of countries -- something Brazil has been advocating for several years¹² -- as opposed to a full multilateral basis that would affect all 34 countries. Other more intractable issues were postponed to a multilateral discussion to be held under WTO auspices.¹³

In line with the Miami document and as part of its overall trade strategy, the Bush

Administration has over the past few years initiated a multitude of bilateral FTA agreements.¹⁴

¹¹ The earlier FTAA declarations had defined the FTAA as a "single-undertaking" with one set of rules applicable to all parties. This latest declaration may indeed be a major setback in that a subset of "core rights and obligations" is now be interpreted to mean a "single-undertaking." 20 ITR 2001, 12/4/03 and 20 ITR 1960, 11/27/03.

¹² Brazil's official position differs from that of the Brazilian Business Coalition, represented Brazil's private sector, which released the following statement at the Miami meeting: "The new structure proposed increases greatly the degree of complexity of the negotiations and the uncertainties over the result. Environments with multiple rules generate uncertainties, insecurity, and difficulties for the integration of smaller companies." 20 ITR 1961, 11/27/03.

¹³ Despite the length of the negotiation, the negotiating parties have made an incredible effort to allow for transparency in the trade negotiating process. The various draft texts are being released upon completion in all four official languages [http://www.ustr.gov/regions/whemisphere/ftaa.shtml].

¹⁴ This activity reflects the Bush Administration's view of "competitive liberalization," and is fueled by the "fast track" authority it received from Congress. 20 ITR 2001, 12/4/03. The first such agreement involves an FTA with Chile which was concluded on December 11, 2002. USTR Robert Zoellick signed the agreement on June 6, 2003 and the House on July 24 approved legislation (H.R.2738) implementing the agreement by a vote of 270-156. Senate approval came on July 31 by a vote of 66-31.

Total trade between the United States and Chile was approximately \$5.9 billion in 2002; imports accounted for \$3.6 billion, and exports totaled \$2.3 billion. Leading U.S. imports from Chile are fish, grapes, wine, copper, and wood products, and significant U.S. exports to Chile are mining equipment and machinery, aircraft, computers, and telecommunications equipment. The FTA would allow increased market access with 85% of bilateral trade in consumer and industrial products eligible for duty-free treatment immediately, with other product tariff rates being reduced over time. Some 75% of U.S. farm exports would enter Chile duty-free within four years and all duties would be fully phased out within 12 years after implementation of the agreement. For Chile, 95% of its export products would gain duty-free status immediately and only 1.2% would fall into the longest 12-year phase-out period. Other critical issues resolved in the bilateral included environment and labor provisions, more open government procurement rules, increased access for services trade, greater protection of U.S. investment and intellectual property, and creation of a new e-commerce chapter. The trade remedies chapter is limited to safeguards so there would be no anticipated change to the antidumping and countervailing duty options currently available to both countries.

The second free trade negotiation involves five Central American countries – Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua (CAFTA). The Bush Administration started formal negotiations on January 27, 2003 and hopes to conclude an agreement by the end of the year. This agreement is expected to be more controversial than the Chile or Singapore FTAs. [Chile–H.R. 2738/S. 1416; Singapore–H.R. 2739/S. 1417)]

On November 4, 2002, the Administration notified Congress that talks to negotiate an FTA would begin with the Southern African Customs Union (SACU). The first round of negotiations began in Johannesburg on June 3, 2003. SACU is a customs union composed of South Africa, Botswana, Lesotho, Namibia, and Swaziland. A large degree of economic integration exists among the SACU states, with South Africa the dominant economic power. U.S. exports to SACU totaled \$2.5 billion in 2002, led by aircraft, vehicles, construction and agricultural equipment, and computers. U.S. imports from SACU totaled \$4.8 billion, composed of minerals such as platinum, diamonds, and titanium, textiles and apparel, vehicles, and automotive parts. Potential problems relating to an FTA with SACU include competition issues related to the South African telecommunications industry and government procurement, U.S. textile tariffs and quotas, and intellectual property rights especially with regard to access to HIV/AIDS medicines. While all the SACU states are eligible for the tariff preferences under the Africa Growth and Opportunity Act (Title I, P.L. 106-200), the negotiation of an FTA would make these preferences permanent. 19 ITR 2058, 11/28/02.

On November 13, 2002, the Bush Administration notified Congress of its intent to begin FTA negotiations with Australia. Formal talks began in Canberra on March 18, 2003. While the U.S. business community strongly supports the negotiations, the American agricultural community has expressed concern about Australian sanitary and phytosanitary standards that it believes act as a barrier to U.S. exports. For its part, Australia has called for greater agricultural liberalization in the U.S. market. It has denounced the recent U.S. farm bill and recently imposed U.S. import restrictions on lamb. A desire to cement the U.S. Australian strategic relationship, and Australia's cooperation in the war against terrorism, may also influence these negotiations. Two way trade between the United States and Australia totaled \$18.7 billion in 2002. Livestock, wine, minerals, vehicles, and vehicle parts were leading imports from Australia, which totaled \$6.4 billion in 2002. U.S. exports amounted to \$12.3 billion, led by computer equipment, aircraft, vehicles, heavy machinery, and medical equipment. 19 ITR 1684, 10/03/02.

The U.S.-CACM talks began on January 8, 2003, and both sides have said the talks can be completed by year-end.

On October 1, 2002, the Bush Administration had notified Congress of its intent to negotiate an FTA with Morocco. Negotiations formally began on January 21, 2003. The notification letter stated that the proposed agreement would "support this Administration's commitment to promote more tolerant, open, and prosperous Muslim societies." While proposed with a strong national security and foreign policy rationale, the FTA would also seek to support U.S. economic objectives. These include allowing U.S. agricultural products to compete more effectively against those of the European Union, which currently benefit from preferential access. From Morocco's perspective, the FTA could lead to an increase in U.S. foreign direct investment and provide preferences for textile and apparel exports to the United States. U.S.-Morocco trade totaled \$970 million in 2002, composed of \$560 million in U.S. exports and \$410 million in imports. Leading U.S. exports are corn, wheat, soybeans, aircraft parts, and coal; leading imports include electrical equipment, apparel, calcium and chalk phosphates, mineral oil, processed fish, and processed vegetables. 19 ITR 1684, 10/03/02.

On May 9, 2003, the Administration announced an initiative to create a U.S.- Middle East Free Trade Agreement by 2013. This initiative would begin a multi-stage process to prepare countries in the region for an FTA with the United States. Countries would begin the process by negotiating accession to the WTO [In the Middle East region, Afghanistan, Algeria, Iran, Iraq, Libya, Lebanon, Saudi Arabia, Syria, and Yemen remain outside the WTO] and subsequently concluding Bilateral Investment Treaties (BIT) and Trade and Investment Framework Agreements (TIFA) with the United States. 20 ITR, 856, 5/15/2003 and 20 ITR, 857, 5/15/2003.

On May 22, 2003, the Middle East Trade and Engagement Act (S. 1121-Baucus/H.R. 2267- Smith) was introduced to provide duty-free access for import-sensitive goods that are currently excluded from the U.S. Generalized System of Preferences (GSP). According to Senator Baucus, this legislation would be modeled on the existing African Growth and Opportunity Act (AGOA) and Andean Trade Preference Act, and that the legislation could serve as an interim step before these countries join FTAs with the United States. [Remarks of Senator Baucus, *Congressional Record*, May 22, 2003, S.7005.] The proposal includes a declaration by Congress that bilateral free trade agreements should be negotiated, where feasible, with interested countries or political entities in the greater Middle East, in order to increase U.S. trade with the region and increase private sector investment in the region. The Administration has not taken a position on the legislation.

As part of this trade strategy the Administration has initiation negotiations on a U.S.-Central American Free Trade Agreement (CAFTA) involving Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua which began in late January 2003 and it was signed May 28, 2004,

On August 4, 2003, the Administration notified Congress of its intent to begin negotiations for an FTA with the Dominican Republic and Bahrain. 20 ITR 1478, 9/04/03 and 20 ITR 1935, 11/20/03.

On August 4, 2003, the Administration notified Congress of its intention to negotiate an FTA with Bahrain beginning in 2004. The proposed FTA is touted by the Administration as a first step in the creation of the Middle East Free Trade Area by 2013 and foresees the possibility that other nations in the gulf region could link in to this agreement as they reform their economies and develop their trade potential. Bahrain is a kingdom of 640,000 persons, 40% of whom are guest workers, with a GDP of \$7.9 billion in 2001. Bahrain was a founding member of the WTO in 1994 and signed a Bilateral Investment Treaty (BIT) with the United States in 2001 and a Trade and Investment Framework Agreement (TIFA) in 2002. The nation has diversified its economy away from dependence on petroleum and has created a services hub for information technology, telecommunications and health care. U.S. merchandise trade with Bahrain totaled \$802.6 million in 2002: imports of \$395.1 million included apparel, textiles, fertilizers, chemicals, and aluminum and exports of \$407.5 million were led by aircraft and aircraft parts, military equipment, passenger vehicles, machinery, and, not surprisingly, air conditioning equipment. 20 ITR 1478, 9/4/03.

On August 4, 2003, the Administration notified Congress of its intent to begin negotiations for an FTA with the Dominican Republic. The DR is the 31st largest trading partner of the United States conducting trade valued at \$8.3 billion, composed of \$4.2 billion in imports and \$4.1 billion in exports. Leading exports include electrical circuitry, ignition and generating parts, computers, heavy construction equipment, cotton, and apparel; leading imports are composed of apparel, medical instruments, circuit breakers, electrical equipment, and jewelry. Since 1985, the Dominican Republic has received preferential access for many goods under the Caribbean Basin Initiative. The Dominican Republic is the largest economy in the Caribbean with a population of 8.7 million and a GDP of \$21.2 billion. 20 ITR 1935, 11/20/03.

On November 21, 2003, a day after the Miami meetings concluded, The United States and Uruguay announced that they would launch discussions to pursue a bilateral investment treaty (BIT) and would explore possible sectoral agreements to deepen trade. Furthermore, the Administration announced that it would negotiate bilateral free trade deals with Bolivia, Colombia, Ecuador, Panama and Peru. 20 ITR 1963, 11/27/03.

Some noted economists view the US strategy as adding an undue complexity, "is a 'spaghetti bowl' of rules, arbitrary definitions of which products come from where, and a multiplicity of tariffs depending on source." Jagdish Bhagwati and Arvind Panagariya, "Bilateral Trade Treaties Are a Sham," *Financial Times*, July 14, 2003. Even within Congress there are members that have questioned the manner in which potential FTA partners are chosen. Representative Calvin Dooley has called for the establishment of a "strategic roadmap" to help define potential FTA partners that would advance the U.S. economic, geopolitical, and multilateral agenda, given the limited resources of the Office of the USTR. See "Business Treads Carefully in Assessment of Administration Trade Policy," *Inside U.S. Trade*, June 20, 2003. Senator Baucus and Representative Dooley have requested a study from the General Accounting Office on the selection progress for FTA partners. In addition, some business groups have expressed a desire to concentrate more on the multilateral negotiations of the WTO, which potentially could yield greater commercial gains. See "Filling Up with Appetizers," *Congress Daily AM*, June 11, 2003.

The Administration's thinking with respect to international trade negotiations is best summed up in its September 2002 report *National Security Strategy*, where the Administration elevated the concept of free trade and "the freedom for a person or a nation to make a living," to a moral principle. According to this document, free-market economic and trade policies, more than development assistance, provides nations with the ability to lift themselves out of poverty and to insure stability. See National Security Council, *National Security Strategy of the United States*, September 2002, [http://www.whitehouse.gov/nsc/nss.pdf], pp. 17-21.

and passed through the U.S Congress on July 28, 2005 President Bush signed the legislation into law on August 2, 2005.

. The addition of the CAFTA to the general FTA discussions should not be a surprise since it primarily involves US agricultural trade. The United States recorded an agricultural trade deficit of \$847 million in 2002, with the CAFTA region.¹⁵ Guatemala and Costa Rica ranked as the region's top two markets for U.S. agricultural products. They also were the leading suppliers of farm products to the U.S. market.

The US negotiating process can be best described as having multiple tracks. The first and primary track is a commitment to a reduction in average tariffs. The second track consists in sector or issue specific agreements which can not be easily concluded in a regional tariff reduction exercise. This process is best described as a sequential bargaining game. Within this process, the US representing the offering party has multiple recipients. Not all recipients will simultaneously accept a sector or issue specific agreement. Consequently, the search for partners which may appear as a random walk is in reality a sequential probe for an agreeable partner starting with the WTO shifting to a regional FTAA then digressing to a sub-regional CAFTA and finally to a group of bilateral agreements. While a multilateral agreement within the confines of the WTO may appear to be the best solution, at first blush, a Hemisphere wide FTA may turn out to be the first best outcome, especially given the activities of the Europeans in the WTO.¹⁶

¹⁵ U.S. trade with the region totaled \$21.2 billion in 2002. The United States imported \$11.8 billion (primarily apparel items, bananas, coffee, and assembled electronic equipment) and exported \$9.4 billion (led by apparel, textiles, electrical generating equipment, and electrical components for assembly). U.S. agricultural exports to these 5 countries increased 74% over the last decade (1993-2002) to just over \$1.0 billion, while agricultural imports from the region rose 28% to \$1.9 billion. Moreover, U.S. trade negotiators need a Central American trade deal as leverage to help make progress in current hemispheric FTAA negotiations as well as in the multilateral negotiations now going on at the WTO.

¹⁶ The Banana wars are a prime example of what is wrong with the DSU process. See Pelzman, Joseph, 2003. "European Competitiveness and the WTO Dispute Settlement Mechanism: The Case of Bananas," Paper presented

Section II presents the US position in these trade negotiations. Section III presents the partner country positions. Section IV presents a collection of sector specific negotiation issues and problems. Section V presents some concluding remarks. The Appendix outlines a simple backbone of a sequential bargaining game that may explain the US trading process.

at the Fourteenth Annual Conference of the American Society for Competitiveness (ASC) on *Competitiveness in a Dynamic World*, October 9-11. Falls Church, Virginia.

II. The US Position

A primary motivation for the United States in pursuing hemispheric trade liberalization is the value of the region as a market for U.S. exports. The real volume of trade in goods has grown twice as fast as real output bringing total trade (exports plus imports) from about 10% of Gross Domestic Product (GDP) in 1970 to 25% in 2005¹⁷. Trade in assets (e.g. bank accounts, stocks, bonds, and real property) has grown even faster with cross-border asset transactions, for example, rising by a multiple of nearly 220.

This growing globalization has, as expected, highlighted the debate concerning the remaining 'sacred cows' in the U.S. economy. Among the list of the reoccurring concerns are: (1) the perceived negative impact of increased imports on the U.S. worker;¹⁸ (2) the perceived reduction in labor and environmental 'standards' as the U.S. continues to negotiate the various trade liberalization initiatives; and (3) the perceived risks to U.S. economic stability of the larger flow of foreign direct investment into the Latin American countries. Nevertheless, it is true that current Latin American tariffs are roughly four times higher than U.S. tariffs (12% compared to 3%). The lowering of these tariffs (along with other trade barriers) should facilitate significant increases in U.S. export, U.S. investments and lead to higher living standards for the entire region.

¹⁷ U.S Census Bureau, Foreign Trade Statistics may 2006..

¹⁸ While there are always some structural dislocations associated with reduced trade barriers, labor's share of GNP shows no significant trend, up or down, over the past four decades. It has typically been within the range between 68% and 72%, depending on the year examined. See The White House. *Economic Report of the President*, February 2003, p. 306. Furthermore, throughout the 1980s and 1990s, the U.S. terms of trade have slowly risen tending to increase worker real wages rather than erode them. See: U.S. Department of Commerce. Bureau of Economic Analysis. *Survey of Current Business*, various issues; Lawrence, Robert, and Matthew Slaughter. *International Trade and American Wages in the 1980's: Giant Sucking Sound or Small Hiccup?* Brookings Papers on Economic Activity, vol. 2. Washington, Brookings Institution, 1993, arguing that despite the fact that U.S. trade deficits had reduced domestic output, the size of those trade deficits and the potential scale of the effect on domestic labor markets is *far* too small to explain the slow growth of American real wages.

In addition to the purely mercantilist U.S. desires, the current appeal of regionalism for this Administration arises, in substantial part, from impatience with what it perceives to be the relatively slow pace and narrow scope of multilateral trade liberalization under the auspices of the WTO. Some have argued that a sense of "negotiating fatigue" has set it on the part of both the United States and Canada. There is an "increasing frustration . . . over the slow pace of progress in the Uruguay Round, particularly in the critical areas of agriculture, services, investment, and intellectual property" - as well as "the corollary tactical desire, particularly of the U.S., to signal to Japan and the EU that their reluctance to engage in the Uruguay Round negotiations seriously would lead to discriminatory regional alternatives to trade and investment liberalization."¹⁹

On the more parochial side, there is the fear of uncontrollable job displacements associated with reduced trade barriers. If foreign low-wage workers provide a price advantage to their products in international trade, the resulting local market effect on the competing domestic industry may result in labor displacement or reduced growth in wage increases. The obvious empirical question is — have prices of import competing goods that use low-skilled workers intensively fallen relative to the price of goods that use high-skilled workers intensively? There is sufficient economic evidence in the literature that argues that relative prices have not moved in a pattern consistent with the conjecture that trade has adversely affected low-skilled domestic workers.²⁰

¹⁹ See Pierre Sauve, Canada, "Free Trade, and the Diminishing Returns of Hemispheric Regionalism," 4 UCLA J. Int'l L. & Foreign Aff. 237, 240 (1999); David Palmeter, "Some Inherent Problems with Free Trade Agreements," 27 Law & Pol'y Int'l Bus. 991, 991 (1996)

²⁰ See: Cline, William R. *Trade and Wage Inequality*. Institute for International Economics, Washington, DC, 1997; Borjas, George, and Richard B. Freeman; Lawrence F. Katz. *How Much Do Immigration and Trade Affect Labor Market Outcomes?* Brookings Papers on Economic Activity p. 1-90; Susan Collins, *Trade and the American Worker*, Brookings Institution, Washington, D.C., 1997; and Lawrence, Robert Z. and Robert E. Litan. *Globaphobia: The Wrong Debate Over Trade Policy*. The Brookings Institution. Washington, 1998.

The relatively insignificant impact that low wage countries have had on US low skilled workers is not surprising. U.S. imports from countries where wages are less than half of U.S. wages was equal to 2.6% of GDP in 1990, up only slightly from 1.8% in 1960.²¹ This figure may change somewhat as intra-America trade expands but that is not the primary source of concern. The primary source of concern today is with respect to U.S. imports from the PRC. The *Economic Report of the President* estimated that, in 1990, the trade-weighted average hourly manufacturing wage of U.S. trade partners was 88% of that in the United States.²²

For those that view the FTAA negotiations as progressing in a timely manner, there is sufficient evidence to confirm that the negotiating partners have reached agreement on a range of business facilitation measures that include temporary admission of certain goods related to business travelers, express shipments, simplified procedures for low value shipments, compatible data interchange systems, harmonized commodity description and coding system, hemispheric guide on customs procedures, codes of conduct for customs officials, and risk analysis/targeting methodology. In terms of concrete deliverables, one can point to the fact that in the 1990s, intrahemispheric trade grew more rapidly than exports to the rest of the world.²³

Those who view the FTAA process as less than acceptable, argue that in the past decade, negotiators have established a framework for negotiations and have produced a heavily bracketed text, but the differences among the key countries on basic issues remain large. They point out that most of the hard negotiating work remains to be done.²⁴

²¹ Lawrence and Litan, op. cit.

²² Economic Report of the President. February 1998, p. 243.

²³ 20 ITR 1883, 11/13/03.

²⁴ 20 ITR 1960, 11/27/03.

The real battle between the U.S. and the Latin American economies can be seen in the bilateral debate between Brazil and the United States. Brazil has sought "to play one external trading partner (the EU) against the other (the US)²⁵ in order to reduce dependence on either one, and in fact to set up something of an auction dynamic between the EU and the U.S. and thereby gain the dominant position in the Latin American market. Brazil has stated that 2005 is the "absolute limit for an E.U.-Mercosur deal,"²⁶ putting it on the same schedule as the FTAA negotiations.²⁷ Thus when the EU negotiation began to slow over tariff and phytosanitary requirements, Brazil's Foreign Minister could spur them along by stating publicly that "[t]he trend is for increasingly strengthening ties with the FTAA. I am skeptical about negotiations with the EU because they are going very slowly."²⁸ But after the EU Commissioner for External Relations made a visit to Brazil for the next set of negotiations to show "the strong commitment and priority given to the EU-Mercosur negotiations by the European Union,"²⁹ and with progress made in those talks on a variety of issues (including the phytosanitary requirements), the Brazilian press was speculating that "[n]egotiations for a free trade agreement between Mercosur ... and the EU may conclude before the creation of the FTAAs."³⁰ When negotiations over the

²⁵ Mario Esteban Carranza, "South American Free Trade Area or Free Trade Area of the Americas?" in *Open Regionalism and the Future of Regional Economic Integration in South America*. (The Political Economy of Latin America Series, 2000).

²⁶ Brazil-EU: Brazil Confident of an EU-Mercosur Trade Agreement, EFE News Service, Feb. 26, 2002, http://globalarchive.ft.com/globalarchive/article.html.

²⁷ See, Graca Lima Expresses Optimism Over WTO Ministerial in Qatar, World News Connection, Nov. 5, 2001, http://globalarchive.ft.com/globalarchive/article.html.

²⁸ Brazil: Foreign Minister "Sceptical" About Trade Talks with EU, BBC Worldwide Monitoring, Oct. 7, 2000, available at LEXIS, News Group File.

²⁹ Commissioner Chris Patten Opens Third Round of EU-Mercosur Association Negotiations, 2000 Rapid, Oct. 31, 2000, available at LEXIS, News Group File.

³⁰ "Negotiator Sees 'Significant Progress' in Mercosur-EU Talks", BBC Summary of World Broadcasts, Nov. 15, 2000, available at LEXIS, News Group File

EU's agricultural policies did not progress quickly enough, however, Brazil then threatened to refocus its attention on the details of the FTAA.³¹ Apparently, the hope is that Europe can be pressured into lowering its agricultural barriers in order to preserve its market share in Latin America, allowing Brazil and MERCOSUR to then turn around and push for similar liberalization from the United States.³² The EU has recognized that "Mercosur wants to preserve this balance, to the point of making Europe and the United States compete with each other," and that "we have to be on our guard."³³ Despite Mercosur high bargaining power the EU- Mercosur agreement was not completed. The two sides failed to agree on each other's final offers. Among other things, MERCOSUR was not satisfied with the EU's agricultural market access provisions and the EU found MERCOSUR's proposals to open their telecommunications sector and upgrade protection of European geographical indications lacking. Commentators more broadly blamed the failed talks on political weaknesses on both sides. Mercosur was also the responsible for the failure in re-launching FTAA negotiations during the presidential summit of the Americas hosted by Argentina in Mar del Plata.³⁴

While it may appear that Brazil is an outlier in this debate, there are more similarities to Brazil's position in the other Latin American countries than the U.S, is willing to admit. Brazil, like much of Latin America, has a long history of protectionism, with high tariffs and quotas. Many Brazilian and other Latin American companies are wary that they would be overwhelmed

³¹ Brazil-Trade Cardoso: European Protectionism Pushed Brazil toward FTAA, EFE News Service, Apr. 5, 2001, available at LEXIS, News Group File.

³² Argentine News Agency Says FTAA Could Lead to Opening of European Markets, BBC Worldwide Monitoring, Apr. 23, 2001, available at LEXIS, News Group File.

³³ EU Trade Commissioner Lamy Sanguine About FTAA, World News Connection, Apr. 21, 2001, http://globalarchive.ft.com/globalarchive/article.html

³⁴ "Mandelson calls for a new EU/Mercosur round of talks" MercoPress, Feb, 23, 2006, http://www.bilaterals.org/article.php3?id_article=3919

by U.S. competition if the FTAA were to be implemented. The United States, for its part, is determined to maintain protection in sectors most coveted by Brazil among others, e.g. textiles, steel, citrus, and agriculture. Brazil as the representative of the Latin coalition in the FTAA has made it clear that U.S. agricultural domestic support programs and export subsidies need to be addressed within the FTAA negotiations. The United States, however, maintains that these issues must be dealt with in the WTO Doha Round because the United States does not wish to "unilaterally" disarm its farm programs without European Union harmonization.³⁵

CAFTA

President Bush announced the Administration's interest in exploring an FTA with five Central American countries – Costa, Rica, El Salvador, Guatemala, Honduras, and Nicaragua – on January 16, 2002 in a speech before the Organization of American States. The President stated that "our purpose is to strengthen the economic ties we already have with these nations, to reinforce their progress toward economic, political, and social reform, and to take another step toward completing the FTAA."

On October 1, 2002, the Administration notified Congress of its intention to launch the negotiations for the Central American Free Trade Area (CAFTA) in Washington on January 8, 2003 with the aim of concluding the agreement by the end of the year. For the United States, these Central American countries comprise a small trading partner. In 2004, both U.S. imports and exports to the region accounted for approximately one percent of total U.S. trade. But for each of these Central American countries, the United States is their most important trading partner. For Costa Rica, the United States accounts for 40 percent of total trade; for El Salvador, ³⁵ 18 ITR 850, 5/31/01.

47 percent; for Guatemala, 48 percent; for Honduras, 63 percent; and for Nicaragua, 43 percent.³⁶

Even before the CAFTA agreement the central American countries benefited from a number of U.S. preferential tariff programs, including the Generalized System of Preferences (GSP) and the Caribbean Trade Partnership Act.³⁷ Given the limits of these programs and their political instability, the CAFTA beneficiaries hope that a free trade agreement with the United States could provide greater assurance that these preferences would not be reduced or rolled-back in the future.³⁸ In addition, Central American leaders hope that an FTA with the United States would meet broader foreign policy objectives like strengthening democratic institutions in the region.³⁹

III. Latin American Interests and Concerns

The trade regimes of Latin America, in the 1990s are far more liberalized then their predecessors in the 1970s and 1980s. Since 1990, four sub-regional groups have made considerable progress breaking down intra-regional trade barriers. MERCOSUR, the Common Market of the South, consists of Argentina, Brazil, Paraguay, and Uruguay and is the second

³⁶ See USITC, Online Trade Data Web. <u>http://dataweb.usitc.gov/scripts/Regions.asp</u>.

³⁷ GSP - Caribbean Trade Partnership Act.____.

³⁸ This was the same argument used in the US-Israel FTA, See Pelzman, Joseph. 1988. *The Impact of the U.S.-Israel Free Trade Area Agreement on U.S. Exports: Evidence from the First Year of Operation*. Contract No. B9K84908, U.S. Department of Labor, Bureau of International Labor Affairs, Office of International Economic Affairs, Division of Foreign Economic Research, (November); and Pelzman, Joseph. 1993. "Domestic Taxes as a Substitute for Commercial Policy: The Case of Israel." in Nadav Halevi (ed.) *A Decade of Trade Liberalization in Israel*. Jerusalem: The Maurice Falk Institute for Economic Research in Israel. (in Hebrew).

³⁹ 20 ITR 113, 1/16/03.

largest preferential trading group in the Western Hemisphere.⁴⁰ The Andean Community, consisting of Bolivia, Colombia, Ecuador, and Venezuela,⁴¹ currently is the third largest preferential trading group in the Western Hemisphere. Acting unilaterally as well as under the auspices of the Community, individual members have liberalized their own trade and investment regimes in recent years. The Caribbean Community and Common Market (CARICOM), consisting of 13 English-speaking Caribbean nations, has agreed to implement a common external tariff over a period of six years, although members will be allowed to maintain their own non-tariff barriers. The Central American Common Market, (CACM), originally established in 1961, gained new stimulus after a 1990 summit of Central American Presidents. Within CACM, the Central American Group of four — El Salvador, Guatemala, Honduras, and Nicaragua—has taken measures to liberalize and harmonize their trade regimes.⁴²

Most Latin American leaders generally support the establishment of a hemispheric free trade area, believing that an FTAA will help bring about greater prosperity, competition, and entrepreneurial activity. But there are a number of critics like Venezuela, which is one of the main opponents to globalization and free trade agreements. They claim that the United States will benefit the most from the arrangement by demanding further opening of Latin American

⁴⁰ Argentina's recent financial crisis and devaluation, however, is severely challenging the viability of Mercosur today. 20 ITR 975, 6/5/03.

⁴¹ Peru dropped out in 1997. 19 ITR 1606, 9/19/02.

⁴² These arrangements, along with numerous bilateral agreements and unilateral trade liberalization decisions, have reduced average tariff rates in Latin America from over 40% in the mid-1980s to under 12% by 2000, and doubled trade openness, as measured by imports rising from 10% to 20% of gross domestic product (GDP). See Inter-American Development Bank, *Integration and Trade in the Americas*. Washington, D.C. December 2000, pp. 7 and 10.

markets to U.S. goods while following a protectionist course⁴³ for politically sensitive U.S. industries such as steel and agriculture.

Similarly, many Latin American Administrations understand that negotiating an FTAA with the United States opens their economies to increased trade competition and potential U.S. involvement in such issues as environmental standards, workers' rights, and intellectual property rights protection. Some worry that as tariffs fall, the United States would increasingly resort to other procedural ways (such as the imposition of anti-dumping or countervailing duties) to protect its producers and workers. Consequently some nations might not be willing to move as quickly as others toward the goal of free trade. And others, such as Brazil, may attach greater importance and priority to the consolidation and strengthening of sub-regional trade groups before moving towards a hemispheric free trade area.⁴⁴

Beyond that, opposition to hemispheric free trade could grow if the region's unemployment and staggering poverty does not begin to decline. Despite the overall improvement in economic growth in the 1990s, the number of people living in poverty (defined as less than \$1 a day) has dropped from 41% in 1990 to only 35% by 2000. Consequently, while

⁴³ The reference to a protectionist course is based on their reading of US trade remedies which are designed to "level the playing field" for U.S. exports. These remedies are easily divided into these three broad categories of US action:

Safeguard (also referred to as escape clause and Section 201) relief provides for temporary duties, quotas, or other restrictions on imports that are traded fairly but cause or threaten to cause serious injury to a domestic industry. The relief is intended to give the domestic industry the opportunity to adjust to the new competition and remain competitive. The authority for the safeguard relief is found in §§ 201- 204 of the Trade Act of 1974, as amended.[19 U.S.C. 2251-2254].

Antidumping (AD) is relief to remedy the adverse price impact of imports sold on the U.S. market at "less than fair value." The relief is in the form of extra duties on the dumped imports. The authority for AD relief is found in §§ 731-739 of the Tariff Act of 1930, as amended. [19 U.S.C. 1673-1673h].

Countervailing duty (CVD) is relief from the adverse price impact of imports that receive foreign government subsidies. The relief is in the form of extra duties on those imports. The authority for CVD relief is found in §§ 701-709 of the Tariff Act of 1930, as amended. [19 U.S.C. 1671-1671h].

⁴⁴ See discussion above.

many in Latin America agree that the first derivative is of the correct sign, it is the second derivative that is very small and therefore of major concern. As the number of the economies in Latin America that have experienced economic and political turmoil over the past years, increases, the environment conducive to free trade negotiations have deteriorated.

IV. Outstanding Negotiation Issues

Market Access and Trade Remedy Issues.

Market access is a term of art. For the United States the term "market access" is associated with a commitment to reduce tariff barriers. The United States, along with Canada, has the lowest average tariff rate in the Western Hemisphere of 4%. Brazil, by contrast, has much lower peak tariff rates, but has the second highest average regional tariff rate of 15% and relies on other trade barriers, as well.⁴⁵ The latest U.S. offer includes the elimination of duties on textile and apparel imports from FTAA countries five years after the hemispheric pact takes effect, as long as other countries reciprocate. Furthermore, the U.S. offer includes the elimination of tariffs on 65 percent of its consumer and industrial imports and 56 percent of agricultural sector imports from FTAA countries immediately upon the pact's effective date. In terms of regional focus this proposal means that tariffs will be eliminated on 91 percent of the consumer goods and industrialized products imported from the Caribbean nations. But for Brazil and its trade partners in Mercosur, the U.S. offer was a tariff elimination on 58 percent of its

⁴⁵ 2000 unweighted average Most Favored Nation (MFN) applied tariff rates reported in: Inter-American Development Bank, *The New Regionalism in Latin America*, p. 62.

products. The U.S. offer also includes a proposal that all hemispheric duties on consumer and industrial products be eliminated by 2015.⁴⁶

Under the agricultural offer, the United States is offering an elimination of tariffs on approximately 56 percent of agricultural products from FTAA countries. As in the case of industrial imports, the U.S. offer is segmented by the level of development of the exporting country. Consequently, the U.S. offer for CARICOM was zero duty for 85 percent of the region's agricultural export products, for Central America 64 percent, for the Andean nations 68 percent, and for the Mercosur⁴⁷ 50 percent.⁴⁸

For the Latin American negotiators they have been on the record responding to the U.S. offer stating that they will "not be satisfied with an FTAA that is only a tariff elimination exercise."⁴⁹ Brazil and other countries continue to argue that many of their exports are subject to U.S. tariff rate quotas (TRQs) and their related high peak tariffs, as well as countervailing duty and antidumping actions. With respect to agriculture, they would like to address export credits, insurance, credit guarantees, food aid, and state trading enterprises, as well as the effects of agricultural subsidies.⁵⁰

Agriculture is the most protected sector in most economies and for many Latin American countries is critical for their economic well being. Historically, it has proven to be among the most difficult areas to liberalize, yet many Latin American countries consider tackling U.S.

⁴⁶ 20 ITR 294, 2/13/03. Immediate tariff elimination once the FTAA takes effect is contemplated in key sectors, including chemicals, construction and mining equipment, electrical equipment, energy products, environmental products, information technology, medical equipment, non-woven fabric, paper, steel, and wood products.

⁴⁷ Ibid., Two key Brazilian export products, sugar and orange juice concentrate, were left off the U.S. offer.

⁴⁸ Ibid., Agriculture has been a particularly thorny issue in the FTAA talks, with the United States position that export subsidies and farm supports are better addressed in the WTO global talks.

⁴⁹ 20 ITR 1960, 11/27/03.

⁵⁰ Ibid.

agricultural trade policies central to any discussion on market access. The United States has made it clear, however, that it is uninterested in negotiating an agricultural subsidies agreement that does not include Europe and Japan, which will require resuscitating World Trade Organization (WTO) talks following their September 2003 collapse in Cancún, Mexico, in part over agricultural issues.⁵¹

The schedule for market access is another issue currently being debated. This touches on two issues.⁵² The first is dealing with so-called sensitive products, or those a country may wish to protect as long as possible by reducing tariffs over a longer period of time. In NAFTA, for example, many agricultural products fell into the longest (15-year) tariff phase-out schedule. Second, the FTAA negotiators have agreed to allow for "differentiated access" or different schedules for countries based on their level of economic development. This is intended to help smaller economies by giving them quicker access to the U.S. market and allowing them more time to phase out their own tariffs. Brazil, as a relatively developed economy, has raised concerns that such a process may effectively make it the last country to have full access to the U.S. market. The U.S. response is that the time frame is under Brazil's control based on its specific market access offers.

The other major issues that will hit center stage include services, intellectual property rights (IPR), government procurement, and competition policy. Intellectual property rights violations have hurt U.S. producers throughout the world and few countries have a legal protective structure as encompassing as that of the United States. Copyright issues and protection

⁵¹ Brazil has continued to balk on negotiations on investment, intellectual property, and issues related to services and government procurement. From Brazil's point of view, countries interested in these issues should pursue them in the WTO forum or plurilaterally within the FTAA context. This position is a counter to the U.S. insistence that domestic agricultural supports and rules related to unfair trade statutes be negotiated in the WTO. 20 ITR 1934, 11/20/03.

⁵² 19 ITR 1915. 11/7/02.

of digital products are among the more important issues to resolve.⁵³ Competition policy, defined as antitrust procedures and enforcement, is another difficult area because of the need to standardize approaches regulating domestic economic activity, although some argue that it may prove more easily reconcilable than IPR disagreements.⁵⁴

The Latin American response to the US offer, as presented by Brazil has been dubbed the "Three Track Proposal."⁵⁵ The Brazilian offer would: 1) have the United States conduct market access discussions with the Mercosur countries, known at the "4+1" arrangement; 2) jettison investment, government procurement, services, and IPR issues along with agricultural subsidies and antidumping to the WTO; and 3) include the remaining rules-based issues in the FTAA discussions. This might include rules of origin, some disciplines on investment, competition policy, and other issues not dealt with elsewhere. The United States rejected this so-called "FTAA lite" proposal and argued for a comprehensive FTAA. The Miami meetings have, however, given greater weight to the Latin position. On the other hand, the United States continues with its sub-regional and bilateral agreement.

Labor and Environment Provisions.

The two issues that have received the widest coverage in the media and among civil society groups involve language covering labor and environment provisions.⁵⁶ Developing

⁵³ This issue along with intellectual property rights concerns proved difficult to resolve in the US-Chile FTA and if that experience is a good predictor for the FTAA process, we may see the beginning of a very long process of modifying the IP and copyright legislation of all the Latin countries.

⁵⁴ A recent exercise involving a single island economy in the Caribbean is outlined in: Pelzman, Joseph, Godfrey Gordon and Simon Langer, *Establishment of a Fair Trade Commission in Barbados: Initial Diagnostic and Survey of Domestic Market Competitiveness*, Inter-American Development Bank, Barbados, 2000.

⁵⁵ 20 ITR 1234, 7/17/03 and 20 ITR 975, 6/5/03.

⁵⁶ 20 ITR 1627, 10/2/03.

countries resist these provisions, arguing that they: 1) should be left to domestic governing authorities or the relevant international organization; 2) may be difficult for developing countries to meet; and, 3) can be used for protectionist purposes.⁵⁷ Concern from the developed world, on the other hand, is that different standards among trading countries may provide competitive advantages or disadvantages (lower or higher costs to produce). Specifically, the concern goes to ensuring that lower environmental or labor standards in developing countries not become a basis for exploitive, lower-cost exporting, or serve to attract foreign capital investment, and that higher standards, as in the United States, not be challenged as disguised barriers to trade. Environmental advocates also point to the social impact of failure to enforce pollution abatement and resource management laws.⁵⁸

NAFTA set a precedent for including labor and environment provisions in trade side agreements.⁵⁹ Since then, the debate has intensified and has turned on where the language should be placed in the agreement, the specificity of the provisions, and how dispute resolution will be handled. A key reference point is the U.S.-Jordan FTA, which incorporated labor and environment provisions into the text of the agreement and provided for a single dispute resolution mechanism for both commercial and social issues. The wording emphasizes that each

⁵⁷ 20 ITR 806, 5/8/03.

⁵⁸ The US-Chile FTA is viewed by many as setting the standard in this area. comprehensiveness, transparency, modernness, and the approach to labor and the environment--distinguish the U.S.-Chile FTA from the myriad of existing trade agreements. The labor and environment provisions of the agreement use fines in an innovative way to address situations where a signatory country is not enforcing its own labor or environmental laws.

⁵⁹ NAFTA set a precedent for including labor and environmental provisions in trade side agreements, an approach also adopted in the 1997 Canada-Chile FTA. At the third Summit of the Americas, President Bush and the other hemispheric leaders made clear their support for dealing with labor and environmental issues. *The Declaration of Quebec City* states:

[&]quot;We commit our governments to strengthen environmental protection and sustainable use of natural resources with a view to ensuring a balance among economic development, social development and the protection of the environment...and...we promote compliance with internationally recognized core labor standards as embodied in the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work."

country will be held accountable for enforcing its own laws, will reaffirm its commitments to basic United Nation's International Labor Organization (ILO) labor standards, and not diminish its standards as a way to pursue trade and investment opportunities. Trade sanctions, although not expressly called for, are also not excluded as a possible remedy for noncompliance.⁶⁰

Many in the United States and Latin America found these provisions too strict and resistance arose over the possible use of trade sanctions. The U.S.-Chile FTA calls for limited "monetary assessments" to address noncompliance, with a recourse to loss of trade benefits to collect unpaid fines, if needed. Labor advocates, however, argue that the U.S.-Chile FTA steps back from the U.S.-Jordan commitments because dispute resolution expressly applies only to upholding domestic labor laws, not reaffirmation of ILO standards nor "non-derogation" from domestic standards.⁶¹ This issue, however, hinges on one's interpretation of Congressional intent of negotiating objectives, as written in the TPA, which the USTR argues it has met in the Chile agreement. The monetary assessment is also questioned as a "meaningful deterrent" for various reasons, which is also disputed by the USTR. Given the continuing debate over labor and environment language, the issue appears to remain open with respect to the FTAA.

V. SOME CONCLUDING REMARKS

Brazil, representing the newly industrial countries in Latin America, challenged three U.S. policy initiatives. First, U.S. pursuit of sub-regional trade arrangements such as NAFTA, ATPA, and CBI, as well as, bilateral deals with Chile and Central America, which it views as ⁶⁰ 19 ITR 1746, 10/10/02.

⁶¹ Report of the Labor Advisory Committee for Trade Negotiations and Trade Policy (LAC). The U.S.-Chile and U.S.-Singapore Free Trade Agreements. February 28, 2003. pp. 5-9 and USTR Response to the Labor Advisory Committee (LAC) report on the proposed FTAs with Singapore and Chile. See: [http://www.USTR.gov].

isolating the Mercosur countries, and it, all as part of the US "sequential bargaining" negotiation within the larger FTAA negotiations. Second, U.S. refusal to address agricultural subsidies and antidumping issues in the FTAA, which Brazil considers as effectively formalizing barriers to Brazil's key export sectors and to be in conflict with the FTAA's single undertaking provision. Third, the U.S. offer of "differentiated" market access, which Brazil objects to because it would receive the least favorable treatment compared to smaller and lesser developed countries.

A key issue within FTAA and CAFTA is agriculture. By ruling out discussion of domestic agricultural subsidies in the FTAA, the United States became vulnerable to Brazil's negotiating position. For Brazil it can claim that some 70% of its agricultural exports go to Europe and Asia, and less than 5% to the United States. Therefore, its position on agriculture can best be viewed as embarrassing to an outdated U.S. position.

The Latin position on U.S. antidumping and subsidy laws is an attempt to signal the rest of the world that it wants to restrict access to its own sensitive sectors. In each of the areas that they wish to postpone discussions, there are either protectionist interests or structural economic problems that form the basis for supporting an "FTAA lite." In the service sector which of the Latin economies would be able to compete with the U.S. in such areas as insurance and technology consulting, among others. Respect to IPR, most of the Latin economies are renown more for their piracy than to IPR guarantees. Government procurement an icon of U.S. transparency, runs counter to Latin intentions to support their own firms for as long as possible, without any transparency.⁶²

⁶² Latin American macro instability with a history of inflation and high interest rates has led to the development of credit markets and a banking system that technically rely on the subsidization of long-term lending rates through the federal development bank, while private banks tend to hold high-yield federal bonds that are low risk compared to investing in capital projects.

The Miami declaration may in fact be the best one can achieve at that time. For the United States, the most critical factor is that even a slight positive movement is better that a complete breakdown in negotiations. Moreover, it can pursue its strategy of dividing and isolating the most troubling of the Latin economies, e.g. Brazil and Argentina. It is the latter realization that may convince the anti-FTAA contingent in Latin America to embrace a full regional agreement rather than living with a growing array of bilateral agreements that introduce complication into the regional trade pattern.

APPENDIX

Sequential Bargaining as a Framework to Explain US Trade Policy

As the trade negotiations within the FTAA region become more complicated with many more options for both the United States and its Latin American partners, it becomes more difficult to manage the theoretical construct for this exercise. In order to simplify the process we start by characterizing the international trade negotiation as occurring between an exporting and an importing country. If a bilateral negotiation brings a successful outcome, this outcome becomes the best trade agreement, which utilizes each country's expectations and benefits.

We start our review by focusing on a construct defined as a sequential bargaining model with incomplete information. As John Nash first postulated the bargaining problem with complete information and preferences satisfied by the von Neuman-Morgenstern assumptions,⁶³ each delegation from the importer's country as a seller and exporter's country as a buyer (denoted by a delegation I and a delegation E, respectively) play the bargaining game by looking for the Nash solution.⁶⁴ This solution is "a determination of the amount of satisfaction each individual should expect to get from the situation, or, rather, a determination of how much it should be worth to each of these individuals to have this opportunity to bargain."⁶⁵

The Bayesian equilibrium refers to a Nash equilibrium where delegations update their beliefs by Bays' Rule, and a sequential equilibrium helps to explain the situation under the off

⁶³ Nash, John. (1950), "The Bargaining Problem", *Econometrica*, 18, 155-162.

⁶⁴ Rubinstein, Ariel (1987), "A Sequential Strategic Theory of Bargaining", in T. Bewley (ed.), *Advances in Economic Theory* (Cambridge: Cambridge University Press), 197-224.

⁶⁵ Nash. (1950).

equilibrium from the Bayesian equilibrium.⁶⁶ Sequential rationality⁶⁷ explains the perfect Bayesian equilibrium, so sequential equilibrium is perfect Bayesian and sub-game perfect.⁶⁸

Review of the Formal Theoretical Background

In this section, two bargaining frameworks are examined and compared; one, based on Rubinstein's bargaining model, and the other on Wilson's. Wilson's bargaining model with conventional preferences seems to be more appropriate at explaining the international trade negotiation rather than Rubinstein's. The latter model is presented for comparison purposes.

One of the Rubinstein's contributions to bargaining theory is his completeness of the model with axioms based on Nash's bargaining concepts. Nash gave us a standard framework of bargaining, and his main assumptions are based on preferences of the von Neuman-Morgenstern, non-cooperative model, common knowledge and complete information.⁶⁹ From Rubinstein we know that some of Nash's axioms are too abstract to defend.⁷⁰ Hence, the recent literature on bargaining, extends Rubinstein's model by adding a Walrasian market-clearing price, the existence of a monopoly player, etc.. Wilson mentions that "(e)xtentions of Rubinstein's bargaining model to situation with private information⁷¹ is currently the most active research topic in this area."⁷² Rubinstein's sequential bargaining model is laid out as follows:

⁶⁶ Rasmusen, Eric, (1989), Games and Information (Massachusetts: Blackwell Publishers Inc), 52-54.

⁶⁷ Kreps, David M. and Robert Wilson. (1982), "Sequential Equilibria", *Econometrica*, 50, 863-894; Chatterjee, Kalyan, and Larry Samuelson. (1987), "Bargaining with Two-sided Incomplete Information: An Infinite Horizon Model with Alternation Offers", *The Review of Economic Studies*, 54, 175-192.

⁶⁸ Kreps and Wilson. (1982) and Rasmusen (1989).

⁶⁹ Nash (1950) and Nash. (1953), "Tow-Person Cooperative Games", *Econometrica*, 21, 128-140.

⁷⁰ Rubinstein, Ariel (1987), "A Sequential Strategic Theory of Bargaining", in T. Bewley (ed.), *Advances in Economic Theory* (Cambridge: Cambridge University Press), 197-224.

⁷¹ If preferences are the von Neuman-Morgenstern, incomplete information could be treated as the same consequence as private information.

the bargaining situation - two players are bargaining over the set of feasible agreements X = [0,1]. Their preferences are mapped over X. If $x \in X$ is greater than $y \in Y$, the first player, say player 1, prefers x to y, and the second player, say player 2, prefers y to x.

- 1. Two players (a seller and a buyer) will share 1 dollar that they own jointly. An element $x \in X$ is the portion of the dollar that player 1 receives.⁷³
- 2. "A seller of one unit of a good with reservation price 0 wishes to sell the good to a buyer with reservation price 1. A number $x \in X$ stands for the price the buyer pays the seller."⁷⁴
- 3. A seller faces a stream of profits. A member $x \in X$ is the proportion of the profits that is given to the buyers.
- 4. Two players such as a seller and a buyer in a bartering economy own initial bundles (1,0) and (0,1). The contract curve of the proper Edgeworth box can be made equivalent to X by identifying $x \in X$ with the point on the curve where 1 is left with x units of his initial commodity.⁷⁵

In a process of developing time preferences, Myerson and Satterthwaite found a possibility of the negative gains from trade.⁷⁶ Wilson summarized that we do not always see the all of the gains from trade, so there is a positive consequence to reopen trading. Therefore, Peter C. Cramton recommended a study of perfect market game that allows continuation.⁷⁷ Peter C.

74 Ibid.

75 Ibid.

⁷⁷ Wilson (1987).

⁷² Wilson (1987). "Game-Theoretic Analysis of Trading Processes", in T. Bewley (ed.), *Advances in Economic Theory* (Cambridge: Cambridge University Press), 33-70.

⁷³ Ibid.

⁷⁶ Myerson and Satterthwaite. (1983). "Efficient Mechanism for Bilateral Trading", *Journal of Economic Theory*, 28, 265-281.

Fishburn and Rubinstein introduced time preferences to this problem.⁷⁸ Rubinsteain extended the concept of time preferences by adding stationerity,⁷⁹ and Cramton combined these elements, which led to a development dynamic bargaining models.⁸⁰

Rubinstein's bargaining procedure starts as following: players negotiate in the set N = $\{0,1,2,3...\}$. A seller makes the first offer and a buyer decides to accept his offer or reject it. If she refuses his offer, then she can make a counteroffer in the next period. The negotiation finishes when an agreement is reached with one side accepting the offer. The model is infinite horizon, and "there are no rules that bind the players to previous offers they made." "Those players are indifferent to the path of rejected offers made during the negotiation." An outcome is denoted by (x, n) with $x \in X$ at stage $n \in N$ when they agree with each other, otherwise, players receive a disagreement denoted by D.⁸¹

In the case of international trade negotiation, time preference is less important, because there are more incentives to accept the first offer rather than to create additional costs from the delay of negotiations. These costs are associated with preparing the first stage meeting and of opening the next meeting again. We assume that each delegation is composed of experts who have established tariff-line tariff concessions and timing along with the language for revisions in IPR rules, labor and environmental standards, along with other sub-components of the offer. Given the costs of the initial offer, it is assumed that each negotiating team is making the best

⁷⁸ Fishburn, Peter C. and Ariel Rubinsttein. (1982), "Time Preference", *International Economic Review*, 23, 677-694.

⁷⁹ Rubinstein, Ariel. (1982), "Perfect Equilibrium in a Bargaining Model", *Econometrica*, 50, 97-109.

⁸⁰ Cramton, Peter C. (1985), "Sequential Bargaining Mechanisms", in A. Roth (ed.), *Game Theoretic Models of Bargaining* (Cambridge: Cambridge University Press), 149-179.

⁸¹ Rubinstein (1987).

offer from its so-called common knowledge and intends to lay the foundation for the best agreement at the first stage. The alternative, no agreement is assumed to mean nothing⁸² for each negotiating team. We also exclude the possibility of a negative gain. According to Wilson, "the delays and failures to agree are inefficient ex post only from the privileged view of hindsight."⁸³

Wilson's bargaining is a trading rule of a double auction between an offer and an acceptance. The buyers bid of max (b_i) and the sellers offer of min (o_i). From Figure 1 one can see,⁸⁴ the clearing prices are drown by a players' aggregate demand and supply schedules (a price versus quantity diagram), which formed by ordering their bids and offers.⁸⁵



Hence, while an exporter minimizes his/her prices of an offer, an importer maximizes his/her prices of bid such that:

$$p_s = max \{b_{k+1}, O_k\}$$

⁸² We do not refer to a zero gain form trade.

⁸³ Kennan, John and Robert Wilson (1993), "Bargaining with Private Information", *Journal of Economic Literature*, 31, 45-104.

⁸⁴ Figure 1 is quoted from Wilson (1985).

⁸⁵ Wilson (1985). "Incentive Efficiency of Double Auctions", *Econometrica*, 53, 1101-1116.

$$p_0 = \min \{b_k, O_{k+1}\}$$

where $b_k = b_{i(k)}$ is *k*th largest bid by an importer and $O_k = O_{i(k)}$ is *k*th smallest offer from an exporter. As a result, their gains from trade are such that:

$$\sum b_i - \sum O_j$$
.

This formula of gains from trade plays is tantamount to traders maximizing the gains from trade in Wilson's double auction, which is directly applicable in our case of international trade negotiations.

Wilson's general framework and procedure is as follows: economic environment is common knowledge among *n* players who know privately the realization $r_n \in R_n$ (where *r*'s are parameters which affects a player's preferences.) There is a finite set N of players and $n \in N$ player has a feasible set of net trades of X_n contained in a set S. The players are divided into *m* importers $i \in M$ and *e* exporters $j \in E$ where N is the union of set M and set E and neither M nor E is empty. The clearing price is denoted as:

$$\mathbf{p} = \mu_1 p_0 + \mu_2 p_s$$

where μ_1 and $\mu_2 = 1 - \mu_1$ are positive weights such as $\mu_1 = m/(m+e)$.

An allocation of (x_n) $n \in N$ yields the von Neumann-Morgenstern utility U_n $(x_n ; r_n)$ of the expected utility such that:

$$U_n(x_n; r_n) = u_n(r) x_1 + x_2$$

where there are two commodities. The utility satisfies some properties such as a continuous mixture set, indifferent preferences and uniqueness. The function is f: $X_n \in N S_n$ which approaches to a set A of random allocations. This procedure induces a game of incomplete information while its strategy for a player *n* is a function of $p_n : R_n$ which approaches S_n . This means that a player's action is contingent on his type of preferences. An assignment $(p_n)_{n \in N}$ of

strategies to the players is a Nash equilibrium when we assume that there is no player has an alternative strategy which improve his expected utility contingent on his type of preferences, and we also suppose that the other players use their assigned strategies. Individual rationality is defined by V_n is greater than $U_n(0;r_n)$ where $V_n(r_n)$ equals $E\{U_n(x_n; r_n)|r_n\}$ which defines a player *n*'s expected utility contingent on his type $r_n \in R_n$ from this trading process.⁸⁶ This follows that:

$$V_n > U_n (0; r_n)$$

where $V_n(r_n) = E\{U_n(x_n; r_n)|r_n\}.$

The trading process⁸⁷ is incentive efficient⁸⁸ if there is an assignment $(\alpha_n (\bullet))_{n \in \mathbb{N}}$ of contingent welfare weights to the player's preferences. Efficiency is one of the main concepts to analyze an economic behavior. As Myerson and Satterthwaite analyzed a bargaining as direct revelation game,⁸⁹ Wilson mentioned that the direct revelation game leads to the efficient trading rules.⁹⁰ From the figure above, a point of market clearing prices between b_i and o_i occurs when a bid price equals an offer price such that:

$$p_s = \max \{b_{k+1}, O_k\} = p_o = \min \{b_k, O_{k+1}\}.$$

If the distribution of preferences and endowments is based on common knowledge, delegations could know the market-clearing price. Hence, delegations receive their preferred net gains from

⁸⁶ Ibid.

⁸⁷ Wilson defines it as a trading rule.

⁸⁸ By "incentive efficient" it is mean the case where it is false that it is common knowledge that another rule would improve some agents' expected gains from trade without reducing others' expected gains." See Wilson (1985)

⁸⁹ Myerson, Roger. and Mark A. Satterthwaite. (1983), "Efficient Mechanism for Bilateral Trading," *Journal of Economic Theory*, 28, 265-281.

⁹⁰ Wilson, Robert. (1987), "Game-Theoretic Analysis of Trading Processes," in T. Bewley (ed.), *Advances in Economic Theory* (Cambridge: Cambridge University Press), 33-70.

bargaining.⁹¹ This incentive efficiency of trading rules reveals the maximum point of the welfare measure such that:

$$W = E \{ \sum \alpha_n (r_n) V_n (r_n) \}.$$

This is the welfare measure and a linear utility function defined by α_n : R that approaches to positive number of S and

$$E\left\{\sum \alpha_n\left(r_n\right)\right\} > 0;$$

therefore, the welfare weights are not all zero.92

According to Wilson (1985), the import seven lemmas are:

<u>LEMMA 1</u>: V_n has the derivative $E\{\partial U_n(x_n; r_n) / \partial r_n | r_n\}$ at r_n .

Let \tilde{U}_i (r, f) be the expected utility of a buyer *i* whose type is *r* but who adopts the action p_i (f). Then the independence of the players' types implies that:

$$\tilde{U}_i(r, f) = u(r) P_i(f) + E\{x_{2i}|r_i = f\}$$

where $P_i(f) = E\{x_{1i} | r_i = f\}$ is the probability that type \dot{r} acquires a unit. Thus,

$$V_{i}(r) = U_{i}(r, r).$$

Nash equilibrium requires that

$$V_i(r) \ge \tilde{U}_i(r, f).$$

If r is greater than \dot{r} , then the above inequality implies that:

$$\begin{aligned} \{ [u(r) - u(f)]/(r-f) \} P_i(r) &\geq \{ [V_i(r) - V_i(f)]/(r-f) \} \\ &\geq \{ [u(r) - u(f)]/(r-f) \} P_i(f). \end{aligned}$$

In particular, since u is decreasing, P_i is nonincreasing. Taking limits in the above conditions, the derivative is such that:

⁹¹ Wilson (1987).

⁹² Wilson (1985).

Similarly,

$$P_i(r) = -E\{x_{1i}|r_i = f\}$$

As the probability that j's type r trades. A corollary of this characterization is that a buyer's expected utility is fully determined by the minimal expected utility from participation and the chances that higher types trade:

$$V_i(r) = V_i(1) + \int P_i(r) d[u(0) - u(r)]$$

where this integration occurs between r and 1. The participation constraint is satisfied if we have that:

$$V_n(1) \ge 0$$

Let R be the set of players who trade, comprised of the sets R_1 of buyers and R_2 of sellers who trade where R is the union of set R_1 and set R_2 contained in set N, and $|R_1| = |R_2|$. The trading rule and its associated Nash equilibrium make R a random function of the player's types. We also define such that:

$$\dot{\alpha}_{n}(\mathbf{r}) \equiv \mathrm{E} \{ \alpha_{n}(\mathbf{r}_{n}) | \mathbf{r}_{n} \leq \mathbf{r} \},\$$

that is the player *n*'s conditional welfare weight for type r. Moreover, the welfare weights can be recovered from

$$\alpha_n(\mathbf{r}) = [\mathbf{r} \, \dot{\alpha}_n(\mathbf{r})]'.$$

Hence, the players' welfare weights can be scaled as:

$$0 \leq \dot{\alpha}_n(1) \leq 1$$

Let us also define the buyers' and sellers' virtual valuations such that:

$$\varphi_{i}(r) = u(r) + [1 - \alpha_{i}(r)] ru'(r),$$

 $\Phi_{j}(r) = v(r) + [1 - \alpha_{j}(r)] rv'(r).$

LEMMA 2: The welfare measure can be written as

 $W = E\left\{\sum \phi_{i}\left(r_{i}\right) \text{-} \sum \tau_{j}\left(r_{j}\right)\right\} \text{-} \sum \left[1 - \alpha_{n}\left(1\right)\right] V_{n}\left(1\right)$

where a buyer's virtual valuation is $\varphi_i(r) = u(r) + [1 - \alpha_i(r)] ru'(r)$ and a seller's virtual valuation is $\Phi_j(r) = v(r) + [1 - \alpha_j(r)] rv'(r)$. The above relationship is the implication of incentive compatibility.

$$\sum E\{ \alpha_i(r_i) V_i(r_i) \} = \sum \int V_i(r) \alpha_i(r) dr$$

since integration by parts

$$= \sum \{ \dot{\alpha}_{i}(1) V_{i}(1) - \int r \dot{\alpha}_{i}(r) d V_{i}(r) \}$$

since $\alpha_{n}(r) dr = d [r\alpha_{n}(r)]$
$$= \sum \{ \dot{\alpha}_{i}(1) V_{i}(1) - \int r \dot{\alpha}_{i}(r) u'(r) P_{i}(r) dr \}$$
$$= \sum \dot{\alpha}_{i}(1) V_{i}(1) - E \{ \sum \dot{\alpha}_{i}(r_{i}) r_{i} u'(r_{i}) \}$$

where we integrate between zero and one.

If we replace α_i (r_i) by 1 - α_i (r_i), then similarly,

$$\sum E\{[1 - \alpha_i(r_i)] V_i(r_i)\} = \sum [1 - \dot{\alpha}_i(1)] V_i(1) - E\{\sum [1 - \dot{\alpha}_i(r_i)] r_i u'(r_i)\}.$$

The feasibility of allocations implies that:

$$E\left\{\sum V_{n}(r_{n})\right\} = E\left\{\sum u(r_{i}) - \sum v(r_{j})\right\}.$$

Therefore, our welfare function can be solved as:

$$\sum E\{[1 - \alpha_n (r_n)] V_n (r_n)\} - E\{\sum V_n (r_n)\} = E\{\sum \alpha_n (r_n) V_n (r_n)\}$$

= W
= E\{\sum \varphi (r_i) - \sum \tau (r_i)\} - \sum [1 - \alpha_n (1)] V_n (1).

<u>LEMMA 3</u>: Suppose that (all $n \in N$) $\alpha_n \leq 1$. A trading rule is incentive efficient if: (i) (all $n \in N$) $V_n(1) = 0$; and (ii) there exists an increasing function Ψ such that the sets R_1 and R_2 of buyers and sellers who trade maximize that:

$$\sum \Psi (\varphi_i (r_i)) - \sum \Psi (\tau_j (r_j))$$

subject to the feasible condition that $|R_1|$ and $|R_2|$.

If Ψ is the identity then such a trading rule attains the absolute maximum of the welfare measure of incentive compatibility subject to the participation constraint. The choice of R is invariant under any increasing transformation of the players' virtual valuations because the only ordinal comparisons are involved in constructing R to maximize the above function.

<u>LEMMA 4:</u> The transformation Ψ imputed by a double auction is increasing, provided the imputed conditional welfare weights are nonnegative.

If we suppose a convex combination of the valuations $u(r_1)$ and $v(r_2)$ of a buyer's type of preference as r_1 and a seller's type of preference as r_2 such that:

$$\omega(\mathbf{r}_1, \mathbf{r}_2) = [\mathbf{u}(\mathbf{r}_1) \ \mathbf{r}_2 \mathbf{v}'(\mathbf{r}_2) - \mathbf{v}(\mathbf{r}_2) \ \mathbf{r}_1 \mathbf{u}'(\mathbf{r}_1)] / [\mathbf{r}_2 \mathbf{v}'(\mathbf{r}_2) - \mathbf{v}(\mathbf{r}_2) \ \mathbf{r}_1 \mathbf{u}'(\mathbf{r}_1)]$$

$$\equiv [\mathbf{u}(\mathbf{r}_1) \ \mathbf{\hat{v}}'(\mathbf{r}_2) - \mathbf{v}(\mathbf{r}_2) \ \mathbf{\hat{u}}'(\mathbf{r}_1)] / \{[\ \mathbf{\hat{v}}'(\mathbf{r}_2) - \mathbf{v}(\mathbf{r}_2)] - [\mathbf{\hat{u}}'(\mathbf{r}_1) - \mathbf{u}'(\mathbf{r}_1)]\}$$

where there is an inverse of Ψ . Therefore, Ψ is increasing if its inverse has the derivative such that:

$$\omega_{r1}(r_1)'(p) + \omega_{r2}(r_2)'(p)$$

where $(r_1)'(p) \le 0$ and $(r_2)'(p) \ge 0$. This leads that ω is decreasing in r_1 and increasing in r_2 , respectively (r_1, r_2) such as:

$$\rho(\mathbf{r}_1) = \mathbf{p} = \sigma(\mathbf{r}_2)$$

where ρ is the buyers' decreasing strategy and σ is the sellers' increasing strategy. We differentiate ω with respect to r₁ such that:

$$\partial \omega(\mathbf{r}_1, \mathbf{r}_2) / \partial \mathbf{r}_1$$

= {[$\dot{\upsilon}'(\mathbf{r}_2) - \upsilon(\mathbf{r}_2)$] · { $\dot{\upsilon}''(\mathbf{r}_1)$ [$u(\mathbf{r}_1) - \upsilon(\mathbf{r}_2)$] + $\dot{\upsilon}'(\mathbf{r}_1)$ [$\dot{\upsilon}'(\mathbf{r}_2) - \dot{\upsilon}'(\mathbf{r}_1)$]} }/[$\mathbf{r}_2 \upsilon'(\mathbf{r}_2) - \mathbf{r}_1 \upsilon'(\mathbf{r}_1)$]²

< 0, which is proved by Wilson.

LEMMA 5: A double auction imputes welfare weights that are not all negative.

We suppose that $\dot{\alpha}_i$ (r) is uniformly smaller than zero. From LEMMA 3, we have that:

$$\begin{split} \dot{\alpha}_{i} (\mathbf{r}_{1}) &= [\dot{\upsilon}'(\mathbf{r}_{2}) - \dot{\upsilon}'(\mathbf{r}_{1})] / [\dot{\upsilon}'(\mathbf{r}_{2}) - \dot{\upsilon}'(\mathbf{r}_{1}) + u(\mathbf{r}_{1}) - v(\mathbf{r}_{2})] \\ &= \dot{\alpha}_{j} (\mathbf{r}_{2}); \end{split}$$

which are nonnegative iff $\dot{u}'(r_1) \leq \dot{v}'(r_2)$. This implies that:

$$\dot{u}'(r_1(p)) > \dot{\upsilon}'(r_2(p)).$$

Therefore, the left side of the inequality must be zero such as:

$$\mathbb{E}\left\{\sum \mathbf{\acute{u}}'(\mathbf{r}_{i}) - \sum \mathbf{\acute{v}}'(\mathbf{r}_{i})\right\} \geq 0.$$

As a result, the supposition is contradicted and we conclude that there is some interval of nonnegative imputed welfare weights.

<u>LEMMA 6:</u> $\dot{\alpha}_j$ $(r_1(p^*)) \ge 2\mu_1 /(1 + \mu_1)$ and $\dot{\alpha}_j$ $(r_1(p^*))$ approaches to one as *n* approaches to infinity, and symmetrically for sellers where μ_1 is the weight by which the buyer's bid affects the clearing price. This Lemma 6 is proved by the property of symmetry.⁹³ According to Wilson, we have that:

$$\begin{aligned} 1 - \dot{\alpha}_{j} (r_{1}(p^{*})) &= [p^{*} - v(0)] / [r_{1}(p^{*})|u'(r_{1}(p^{*}))|] \\ &\leq \mu_{2} / (1 + \mu_{1}) \\ &\equiv (1 - \mu_{1}) / (1 + \mu_{1}). \end{aligned}$$

Therefore, a symmetric result holds for the sellers' imputed conditional welfare weights at p**. <u>LEMMA 7:</u> As the intersection of set *m* and set *n* approaches to infinity, $u(r_1(p))$ approaches to p and $\dot{\alpha}_i$ ($r_1(p)$) approaches uniformly and similarly to one.

Since we have that:

⁹³ Roth, Alvin E., (1979), Lecture Notes in Economic and Mathematical Systems (Berlin: Springer-Verlag Heidelberg).

$$[u(r_1(p)) - p] \cdot b(p) \le \mu_1/m \text{ and } [u(r_2(p)) - p] \cdot b(p) \le \mu_2/n$$

where $b(p) = \min \{-(r_1)'(p), (r_2)'(p)\}$. If we assume that B is uniform bounded on the magnitudes of the derivatives of ρ and σ , then b(p) is equal to or less than 1/B. Therefore, as the intersection of set m and set n approaches to infinity, both $u(r_1(p))$ and $v(r_2(p))$ uniformly converge to p. As a result, $\dot{\alpha}_i(r_1(p))$ equals $\dot{\alpha}_i(r_2(p))$, which uniformly approaches to one.

As a result Wilson's sequential bargaining model is relevant to apply to the international trade negotiation by maximizing the country's welfare.

Application to International Trade Negotiation

In what follows we show that in this game the bilateral bargaining brings better outcome than the multilateral bargaining. We suppose that W is the welfare function of a country A, and W_t is the welfare function under WTO negotiation and W_b is the welfare function under the bilateral negotiations. A country A maximizes its welfare function by choosing r.

Max. W_t

or

Max. W_b

For our presumption to hold we should have a result whereby the optimum in the WTO negotiation is greater than the one under the bilateral negotiation:

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Max. W_t < Max. W_b.
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This result depends on the size of the market share under each negotiation.

The maximization problem can be solved with a recursive competitive equilibrium, which solves an optimization problem by using the Bellman equation and a set of functions for

quantities, prices and level of utility⁹⁴. The problem between an exporter and an importer is maximizing the welfare function by choosing their type of preference r_n to control the volume of trade x_n such that:

Max. W = E{
$$\sum \alpha_n (r_n) V_n (r_n)$$
}
subject to $\sum p_o *x(exp) \ge \sum p_s *x(imp)$

where x(exp) is a net trade of exporter and x(imp) is a net trade of importer and we have that V_n (r_n) equals $E\{U_n(x_n; r_n)|r_n\}$ by the assumption.

In a recursive competitive equilibrium, there is a unique Pareto optimum. In fact, this Pareto optimum is our competitive equilibrium in the economy. In this sense, a negotiator in international trade determines a Pareto optimum by solving the maximization problem. We solve this recursive competitive equilibrium problem as a dynamic problem. The following properties hold in a recursive competitive equilibrium:

- 1. The Bellman equation solves our maximization problem with the quantity function;
- 2. Prices are competitively determined;
- 3. Market clears;

4. There is a consistency that aggregated quantity equals the individual policy function in the optimal point;

In this environment, a rational expectation's equilibrium is equivalent to the Arrow Debreu equilibrium⁹⁵. In equilibrium, we have that the volume of trade in export equals the volume of trade in import, and supply from an exporter would equal demand by an importer. By solving the first order conditions in a case of the weight alpha has a power to the type of preference,

⁹⁴ Williamson, Steve, (1999), "Notes on Macroeconomics Theory", University of Iowa.

⁹⁵ Williamson notes that this assumption is not true in models with heterogenous agents. In those models, complete markets in contingent claims are necessary to support Pareto optima as competitive equilibria as complete markets are required for efficient risk sharing.

$$U'(x_n)/\alpha U'(x_{n+1}) = p(r_n)/p(r_{n+1})$$

Hence, marginal rate of substitution for traders equals the relative price ratio between an exporter and an importer.

The net export could be either a function of the type of preference, the volume of export and its price or the type of preference times a function of the volume of export and its price as:

$$\sum p_o * x(exp) = F(r, x, p)$$

or
$$\sum p_o * x(exp) = r F(x, p).$$

Similarly, the net import could be either a function of the type of preference, the volume of import and its price or the type of preference times a function of the volume of import and its price as:

$$\sum p_s *x(imp) = F(r, x, p)$$
or

$$\sum p_s *x(imp) = r F(x, p).$$

Our Bellman equation by choosing r is such that:

 $v(r) = \max \{U'(x) + \alpha_n (r_n)v(r')\}$ subject to $\sum \mathbf{p}x(exp) \ge \sum \mathbf{p}x(imp).$

Each country optimizes its welfare through maximizing gains form trade.