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The Impacts of Free Trade Agreements on use of Antidumping

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Abstract

This paper investigates the effects of bilateral trade agreements on the antidumping use. It points out the antidumping investigations and measures imposed from the 16 major members of WTO, in the recent years. It also states the increasing number of use of antidumping and its policies in developing countries. From the available data it examines the alterations of antidumping investigations initiated by a developed country (the USA) and a developing country (Brazil) against their major trading partners under bilateral trade agreements. It states that if there is more or less antidumping use depending on a country being developed or developing.

Keywords: FTAs, Antidumping, WTO, Developed Countries, Developing Countries

1.Introduction

Many countries take action against dumping. The General Agreement on Tariffs and Trade lays down the principles to be followed by the member countries for imposition of anti-dumping duties. It has been argued that in the post-Uruguay-Round world, anti-dumping (AD) actions, as with other contingent protection measures, may become an 'instrument of choice' in place of tariffs to restrict international trade (Llyod and Morrissey, 1998). Pursuant to GATT, 1994, detailed guidelines have been prescribed under the specific agreements which have also been incorporated into the national legislation of the member countries of the WTO. If investigations show that dumping is taking place and domestic industries are being hurt or in other words if there is injury to imports-competing with domestic industry, legislation permits countries to act against dumping. In order to do that the government has to be able to show that dumping is taking place, calculate the extent of dumping (how much lower the export price is compared to the exporter's home market price), and show that the dumping is causing damage or threatening to do so.

GATT (Article 6) allows countries to take action against dumping. The Anti-Dumping Agreement clarifies and expands Article 6, and the two operate together. They allow countries to act in a way that would normally break the GATT principles of binding a tariff and not discriminating between trading partners — typically anti-dumping action means charging extra import duty on the particular product from the particular exporting country in order to bring its price closer to the “normal value” or to prevent the damage to domestic industry in the importing country. WTO agreement allows governments to act against dumping when real damage occurs to the domestic industry.

According to the WTO antidumping action can be defined as, charging additional import duty on the particular product from a foreign country in order to bring its price closer to home country's. The exporting country can undertake to raise its price to an agreed level in order to avoid antidumping import duty. The GATT/WTO states over the past 25 years, the legal definition of 'dumping' is almost completely divorced from any economic notion of antidumping (Blonigen-Prusa, 2001). There are many different ways of calculating whether a particular product is being dumped heavily or only lightly. The agreement follows a range of possible options.¹ Before 1980 almost all AD activity was restricted to six major countries: The USA, the EU, Australia, Canada, South Africa and New Zealand with a total number of cases of two or three-dozen per year at the most. After 1980, not only the EU and the USA still had the most AD cases but also developing countries such as Brazil, India and Turkey have become intense users of AD. The trend has been altered recently where the developing countries have started using antidumping to limit their imports, many of them have also given up most other forms of flexibility in trade policy adopting WTO disciplines and agreeing to bind their tariffs (Bown, 2007).

In this paper, first of all we want to demonstrate the alterations in the new antidumping initiations and the antidumping measures that are imposed by the WTO members and we will compare the adjustments that took place during the 2007-2008 time period. By doing so we will be proving how the trend changes in terms

¹Persuant to the WTO, antidumping measures are also classified into three, such as, the main one is based on the price in the exporter's domestic market, another one is the price charged by the exporter in another county, finally the last one is a calculation based on the combination of the exporter's production cost, other expenses and normal profit margins. AD measures must expire five years after the date of imposition. In some cases AD investigations end immediately in cases where the authorities determine that the margin of dumping is insignificantly.

of AD initiations from developed to developing countries.

Secondly we will show how the Free Trade Agreements affect the use of antidumping on governments. Depending on the size of the economy(developed or developing countries) we want to figure out what the impact is of FTAs on antidumping use . In our examples we will use the AD initiations of the USA and Brazil, depending on whether it is a developed or developing country, respectively. Latterly, we will show the case of AD initiations without any FTAs.

Then, we will estimate some econometric models, explaining the number of AD initiations by using the macroeconomic determinants, to see what the significance of FTAs is on the use of antidumping. We will estimate the USA-Canada, under a FTA (CUSTA) , the USA-Mexico under NAFTA, as the USA is reporter country whereas Canada and Mexico are its trading partners. Also we will review of developing countrys' use of antidumping investigations and measures imposed after the 1980s. Finally, we will estimate the model for Brazil and its trading partner Argentina under MERCOSUR.

2.The new AD investigations and measures imposed during 2007-2008

According to recent data from WTO , comparing 2008 to 2007, the number of new antidumping investigations increased by 31%, whereas the number of antidumping measures applied increased by only 19%. During the same period developing countries dominated this trend in terms of AD investigations and AD

² These 16 Members are: developing countries such as; Argentina, Brazil, China, Colombia, Egypt, India, Pakistan, South Africa, Taiwan, Turkey, and developed countries such as; Australia , Canada, European Union, New Zealand, South Korea and the United States.

measures. They initiated 73% of all new investigations but on the other hand they were the target of 78% of all new initiations (Bown, 2007).

Pursuant to data from WTO, 16 Members² initiated 85% of all antidumping investigations by the WTO membership during 1995-2006. In 2007 those sixteen WTO members initiated a total number of 143 new antidumping investigations while in 2008 the total number of initiations was 188. They applied 100 AD measures in 2007 and 120 AD measures in 2008 with an increase of 20% in one year. Developed countries, in 2007, initiated 58 (41%) new investigations and applied 23 (23%) new AD measures, comparing to 2008. In 2008 they initiated 50 (27%) of the total 188 new investigations and imposed 54 (45%) of the 120 new AD measures. On the other hand, in 2008, developing countries initiated 138 (73%) of the 188 new investigations and imposed 66 (55%) of the 120 new final measures for 2008. This compares with 85 (59%) new investigations and 77 (77%) new measures that developing countries applied in 2007.

In 2008 The most antidumping investigations in developed countries were from the United States and the European Union (18 each), followed by Australia (6), South Korea (5), Canada (3). From the developing countries India initiated the most antidumping investigations in 2008, with 54 new initiations. It was followed by Turkey and Brazil (23 each), Argentina (19), China (7), Colombia (6), Pakistan, and South Africa (3 each). Egypt and New Zealand had initiated new investigations in 2007, but they did not initiate any new investigations in 2008.

Comparing 2007 to 2008, there is a declining number of AD initiations for the United States, South Africa, and South Korea, but there is an increasing number

of AD initiations for Canada, the European Union, India, Pakistan, Turkey, China, Colombia, Australia, Brazil, and Argentina. The most commonly investigated products in 2008 were raw materials such as; the steel and iron sector with a number of 48 initiations, followed by the chemical sector and the textile/apperal sectors (35 initiations each). In the iron and steel sector, India initiated one half of them, while the EU initiated only 11.

In 2008 China's products were most frequently subjected to new antidumping measures, comprising of 41% (49 new measures) of the 120 new measures imposed during that period. These 49 measures were imposed on Chinese exports, followed by the EU (9), Taiwan (8), South Korea (7), the US (6), India and Indonesia (4 each).

3. Developing countries and AD Policy

Implementation of antidumping in developing countries has become frequent in recent years. Before a government can enforce an antidumping import restriction, WTO Agreement requires sufficient economic corroboration to confirm that behaviour of foreign exporters and the market conditions convince the legal criteria and procedures. Within antidumping laws and the economic incentives, domestic industries diverge in their need and skill to attain import protection. Table 3.1. Presents the antidumping investigations and imposed measures among the developing countries which have been WTO member since 1995. The same table highlights the steady increase in developing countries' initiations and their position with respect to the number of measures actually taken. Table 3.1.2 demonstrates the four developed economies that are active users of AD during the WTO period. The period is intercepted in 1995, to compare the total amount of AD investigations under

GATT (before 1995) and under WTO (after 1995). A substantial amount of antidumping investigation and imposed measures have been utilized by developing countries such as: Argentina, Brazil, Colombia, India, Indonesia, Mexico, Peru, Turkey and Venezuela. Between 1995-2005 these nine developing countries utilized 39.5% of all the new investigations and 44.8% of all the new measures imposed.

Table 3.1. - Nine Developing countries Use of AD under GATT and WTO Periods

<i>Country</i>	<i>GATT period, 1985-1994</i>		<i>WTO Period, 1995-2004</i>	
9 Developing Countries	Number of AD Investigations		Number of AD Investigations	Number of AD Measures Imposed
Argentina	44		192	139
Brazil	58		116	62
Colombia	11		23	11
India	9		400	302
Indonesia	0		60	23
Mexico	123		79	69
Peru	11		55	34
Turkey	74		89	77
Venezuela	6		31	25
Total	336		1045	742
Share of total	16.2%		39.5%	44.8%

Source: Chad P. Bown, 2007, table 1, page 27.

During the same period four developed countries initiated 36.4% of all cases and they used 33% of all new measures imposed. Under GATT, developing countries initiated only a total of 16.2% of the cases whereas four developed countries initiated a total 73.1% of the cases.

Table 3.2.-Four Developed Country Use of AD under GATT and WTO Periods

Country	GATT period, 1985-1994		WTO Period, 1995-2004	
	Number of AD Investigations		Number of AD Investigations	Number of AD Measures Imposed
4 Developed Countries				
Australia	447		172	54
Canada	223		133	80
European Union	364		303	193
United States	475		354	219
Total	1509		962	546
Share of total	73.1%		36.4%	33.0%

Source: Chad P.Bown, 2007, table 1, page 27.

Table 3.3 presents some of the products which industries use more number of antidumping protection from imports. Each developing country initiated at least one antidumping investigation and received import protection under at least one imposed measure.

Table 3.3.- Antidumping Use by Industry Across Nine Developing Countries, 1995-2002

COUNTRY	Iron and Steel	Chemicals	Fabricated Metal	Glass products	Food products	Textiles	TOTAL
ARGENTINA	5	5	6	5	3	2	26
BRAZIL	6	6	4	3	3	2	24
COLOMBIA	3	3	0	0	0	1	7
INDIA	6	7	1	0	0	2	16
INDONESIA	5	2	0	0	1	0	8
MEXICO	5	5	2	0	3	1	16
PERU	2	3	1	0	3	1	10
TURKEY	1	3	1	0	0	3	8
VENEZUELA	4	2	1	0	0	0	7

Source: Global Antidumping Database

Between 1995-2002 the iron - steel and chemical sectors received the highest number of antidumping protection across nine developing countries with a total number of 37 and 35 , respectively. Raw material products constitute the main AD investigations in these 9 developing countries. Argentina has the highest number of AD investigations (26), from the 6 industries mentioned in table 3.6.3. , followed by

Brazil (24) , India and Mexico (16 each). Peru (10), Turkey (8), Colombia and Venezuela (7 each). Antidumping investigations tend to be disproportionately concentrated in a few industries. Within active user industries, there are large and powerful firms that dominate the use of antidumping (Aggarwal,2007).

According to data from the WTO, more than 2500 antidumping investigations were initiated globally between January 1995 and June 2004. However not all of these investigations yielded definitive measures. The number of measures actually in force as of the 30 June 2004 was just under 1350.

4. FTAs and the impacts on use of AD

In this part we will demonstrate the chronological evolution of AD initiations of the USA against Canada and Mexico, and also initiations of Brazil against Uruguay and Argentina under the bilateral agreements. Later on we will compare Brazil as a reporter country against its trading partners the USA and the EU without any bilaterel agreement and also with the rest of the world. (major trading partners)

4.1. CUSFTA: the USA and Canada Case (the USA-AD user)

CUSFTA (Canada-United States free trade agreement) was a bileteral trade agreement signed by Canada and the United States on October 4, 1988. The agreement, finalized by October 1987, changed several trade restrictions in stages over a ten year period, and resulted in a great increase in cross-border trade. In the following section we have two tables that shows AD initiations during the time

period between 1980 and 2006. Table 4.1.A shows us the evaluation of AD investigations of the USA against Canada from 1980 to 1988 when is the negotiation date of bilateral agreement.

Table4.1A. - Periods before CUSFTA (1980-1988)

Years	1980	1981	1982	1983	1984	1985	1986	1987	1988
Investigations per year	2	1	2	3	3	4	3	2	4
Periods						1980-1988			
Average investigation per year						2.66			

From the table, the total number of AD investigations is 24. In 1981 there is only one investigation while in 1985 and 1988 have the highest number of investigations (4 for each year). Before the CUSFTA during 1980-1988 the average AD investigation initiated per year is 2.66. Similarly table 4.1.B. demonstrates us the number of AD investigations after the bilateral agreement, the period of 1989-2006.

Table4.1B. Periods after CUSFTA (1989-2006)

Years	1989	1990	1991	1992	1993	1994	1995	1996	1997
Investigations per year	1	-	4	4	1	-	-	-	2
Years	1998	1999	2000	2001	2002	2003	2004	2005	2006
Investigations per year	3	-	1	4	1	1	3	4	3
Periods						1989-2006			
Average investigations per year						1.77			

The time periods after CUSFTA , the total number of investigations is 32 . In 1990, 1994, 1995 and 1999 there are no AD investigations that are initiated. During 1989-2006 the average AD investigations initiated per year is 1.77. We can clearly see that

after the negotiation, the average antidumping investigations per year against Canada diminished from 2.66 to 1.77.

4.2. NAFTA: the USA and Mexico Case

North American Free Trade Agreement (NAFTA) is a trilateral trade bloc in North America shaped by the governments of the United States, Canada, and Mexico. The agreement came into force on January 1, 1994. It superseded the Canada-United States Free Trade Agreement in 1988.

Table 4.2A. points out the AD investigations since 1980 until the negotiation date 1994. the total number of AD investigations initiated against Mexico is 19. During 1980-1983 and 1987-1989 there are no reported AD investigations by the USA. In 1992 the highest number of initiations occur (5).

Table 4.2A - Periods before NAFTA (1980-1994)

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Inv.	-	-	-	1	1	2	2	-	-	2	1	1	5	2	2
Periods									1980-1994						
Average investigation per year									1.26						

To see the path of number of AD investigations after the FTA, table 4.2.B. presents summary data of the cases in each year from 1995 to 2006.

Table 4.2B-Periods after NAFTA (1995-2006)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Inv.	1	1	-	4	2	-	3	1	1	2	5	6
Periods									1995-2006			
Average investigation per year									2.16			

The total amount of AD investigations initiated against Mexico after 1994 is 26. In 1997 and 2000 there are not any investigations whereas in 2006 there are 6 investigations. These results present the total number of AD investigations initiated against Mexico increases after the negotiation of free trade agreement. The total antidumping cases that are initiated against Mexico has increased from 19 to 26 between the time period stated above. The average investigation per year increases from 1.26 to 2.16 after bilateral agreement. On the other hand, the cases in each year grow significantly and almost every year at least exists 1 investigation-except in 1997 and 2000 after the negotiation date.

4.3. The U.S. and the Rest of the World

What about the rest of the world that is trading with the USA? Do bilateral agreements affect the rest of the world? Using the required database for the USA we can state that starting from 1980 until 1988 - the negotiation date for the CUSFTA (Canada-USA FTA)- the total amount of AD investigations in the USA is 445. After the negotiation date to the year 2000 the total amount of AD investigations is 505. Similarly, with NAFTA from 1980 to the negotiation date the total amount of AD investigations is 761. Later, the total number of investigations is 395. However, in contrast there is a diminishing number of investigations initiated from the rest of the world, whereas there is an increasing number of investigations after the trading agreements were enforced.

4.4. MERCOSUR: Brazil-Argentina and Uruguay Case

Mercosur is a Regional Trade Agreement (RTA) among Argentina, Brazil, Paraguay and Uruguay established in 1991 by the Treaty of Asunción, which was

later modified and updated by the 1994 Treaty of Ouro Preto. From the available data, from 1988 to the negotiation date 1994 there are only 2 AD investigations initiated against both Argentina and Uruguay (1 initiation from each country). Later on 1995 to 2003 there are 3 initiations, 2 against Argentina and 1 against Uruguay by Brazil. However, comparing this situation with the rest of the world, there is a high increasing number of total antidumping investigations. For the period from 1988 to 1994 the total cases initiated are 64, but also the period of from 1995 to 2003 the total number of cases initiated are 137.

Table 4.4. AD investigations by Brazil after and before MERCOSUR

	Investigations between	Investigations Between
Country	1988-1994	1995-2003
Argentina	1	2
Uruguay	1	1
Rest of the world	64	137
Average investigations per year	9.47	17.5

The average number of investigations initiated by Brazil against the all trading partners has been increased from 9.5 to 17.5 after the MERCOSUR.

4.5 Brazil- the EU and Brazil-the USA and the Rest of the world

We will consider the use of AD investigations under bilateral trade agreements between Brazil-the EU and Brazil-the USA. However this time there are no FTAs between those countries. We shall compare the impact of the use of AD with and without a bilateral agreement.

Referring to data between 1988-2003 the total number of AD investigations initiated from the EU is 25 and from the USA is 32. The most protected goods were industrial chemicals from both countries. From the necessary data in GATT for the period (1985-1994) Brazil reported 58 AD investigations on the other hand , in WTO period (1995-2004), it reported 166 AD investigations from all over the world. During the same period the total number of antidumping measures imposed was 62. Brazil is one of the most frequent AD users in the developing countries. But which industries use antidumping to pursue protection? The following table identifies the sectors targeted in the majority of Brazilian trade cases.

Table 4.5A- Brazil- the AD investigations and measures imposed from the imported goods

INDUSTRY	Investigations	Shares in Investigations	Measures Imposed	Shares in Measures Imposed
Agricultural Products	25	11.8%	6	11.3%
Chemicals	81	38.2%	23	43.4%
Steel and Steel Related	54	25.5%	8	15.0%
Textile	11	5.2%	3	5.7%
Other non-metal industries	17	8.0%	3	5.7%
Manufactures	24	11.3%	10	18.9%
Total	212	100%	53	100%

Source: 2003 DECOM Annual Report

Chemicals are by far the most affected product category, followed by steel and steel related products, agricultural and manufactured products. The following table demonstrates a remarkable concentration of AD measures against exports from China. Russian and Indian exports have also been targeted by Brazilian authorities.

Table 4.5B- Brazil- the AD investigations and measures imposed in major trading partners

	Initiations	Reviews
China	21	9
India	6	5
Russia	7	3
South Africa	5	2
Mexico	4	2
Germany	4	1
Kazakhstan	3	2
Total	164	35

Source: Global Antidumping Database

Brazil's use of antidumping investigations increased as the country became more integrated to its trade liberalization program in the 1990s. However, compared to the United States, where almost the entirety of antidumping investigations involve the application of provisional duties, in Brazil only 46% of the cases resulting in the application of antidumping duties involved provisional measures. In sum, Brazil's antidumping legislation and procedures are similar to that of other WTO Members (Barral- Brogini, 2005).

5. Methodology and Data

In the following section we define the economic model that would allow to make the estimation. Available data sources are used to construct the econometric model. The antidumping data used in the empirical analysis is product-level information on antidumping investigations, outcomes and affected products are constructed from original source national government publications and accumulated in the Global Antidumping Database (Bown, 2007). The creation of many of the explanatory

variables needed for the econometric estimation is obtained from *United Nations
Statistic Division- Commodity Trade Statistics Database (COMTRADE)*.

5.1. Econometric Model

The econometric model is constructed as follows: The dependent variable is antidumping investigations while the explanatory variables are macroeconomic trends and a dummy variable. We want to explain the initiations in a given year by the imports of a reporter country and the exports of its partner country in a given year. And also the damage to the domestic importing country and the threat of retaliation maybe important answers to this research question (Jallab, 2005). We also add a dummy variable which considers the bilateral agreements between reporter and its trading partner country. The econometric model approach uses maximum likelihood estimation.

One can demonstrate this relationship as ;

$$y_{it} = \beta_0 + \beta_{1t}M_{it} + \beta_{2t}X_{jt} + \beta_{3t}m_{it} + \beta_{4t}x_{jt} + \beta_{5t}\phi + \varepsilon_{it}$$

Where; y_{it} is the number of AD investigations initiated by country i

M_{it} is the imports from country j to country i

X_{jt} is the exports of country i to country j

m_{it} is damage to domestic importing country and can be defined as;

$$m_{it} = \frac{M_{it} - M_{it-1}}{M_{it-1}}$$

x_{jt} is potential threat to domestic exporting industry because of possible retaliation and can be defined as;

$$x_{jt} = \frac{X_{jt} - X_{jt-1}}{X_{jt-1}}$$

φ is the dummy variable (FTA),

ε_{it} is the standard error term.

Also; i is the reporting country and j is its trading partner.

β_o is the constant term and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are the coefficients of the explanatory variables. It is important to mention that $y_{it} = 0, 1, 2, 3, \dots$ is a count variable, ranging from zero to many.

Hence, count data models are commonly applied to this problem. Choice of model depends on the Poisson regression model, which assumes that y_{it} is conditional upon the imports and exports, follows a Poisson distribution.

In this paper; the estimations of the use of antidumping cases based on two reporting countries, USA and Brazil respectively, with their trading partners. First of all we estimated the case of USA-Canada and USA-Mexico under bilateral agreements, then we continued with the case of Brazil-Argentina under a bilateral agreement. In some of the estimations we add lags for both imports exports of trading countries, because the antidumping authorities frequently rely on data from the most recently completed one or two or sometimes three year period in their consideration of injury trends.

5.2. The case of USA-Canada under CUSFTA in 1988

Using the necessary data mentioned above, we estimated the econometric model. The RTA dummy refers to CUSTA that signed in 1988.

The table A in the appendix, reports the basic estimation equation of Poisson regression model by maximum likelihood estimation. The times series show yearly antidumping investigations between 1980 to 2006. The signs of the coefficients are positive for the first lag of imports and exports and also consistent for the potential threat to the domestic exporting country whereas the signs of coefficients are negative for the constant term, the damage for the domestic importing country and the dummy variable. The predicted probability of the dummy variable is *0.018* and it is significant at 5% significance level. The coefficient of imports in the first lag is negative, which means, the injury in the industry level is caused by the imports from its trading partner. The result for the dummy variable is consistent with the theory that it is mentioned previously. After the negotiation date it is expected to have less antidumping investigations initiated from Canada. This situation can be seen from the table A in the appendix with a negative coefficient and with a significant p-value for the dummy variable, CUSFTA bilateral trade agreement.

5.3. The case of USA-Mexico under NAFTA in 1994

Table B from the appendix, it reports the estimation using the same explanatory variables for Mexico as a result of trade with the USA. The dummy variable is the NAFTA regional trade agreement.

From the estimation outcomes, the signs of coefficients for explanatory variables are positive for the imports, the exports and the dummy variable. On the other hand, the signs of coefficients are negative for the constant term, the first lag of the imports and exports. The p-value for first lag of dummy variable is *0.045* and it is significant at 5% significance level. Since the dummy variable is positive and

significant, the estimation result is consistent with the theory. After the NAFTA, there are more AD investigations initiated against Mexico by the USA.

5.4. The case of Brazil-Argentina under MERCOSUR in 1994

Appendix C presents the outcomes from the regression. The FTA agreement MERCOSUR is the dummy variable of the regression. Estimation results show the only the coefficient of exports and dummy are positive. The dummy variable is not significant at any significance level. Because the number of AD investigations is only 3, hence it is not the model. The econometric estimation of the AD investigations from Argentina does not justify the empirical results demonstrated in 4.4.

6. Conclusions

Since the middle of the 1990s, there is a general upward trend in both antidumping investigations and measures imposed by developing countries. Brazil, Argentina, China, India and South Africa are the major users of antidumping in recent years. Within user countries, AD investigations concentrated in a few industries. These industries were mainly steel, chemicals and raw materials. More than 2500 antidumping investigations were initiated globally between 1995 -2004. The reason of increasing number of antidumping use by developing countries is discussed by some authors. Bown (2007) argues that the increase in antidumping use by developing countries raises the concern that much of the trade liberalization commitments they undertook as part of the Uruguay Round negotiations may be offset de facto by new protection (Bown,2007)

The USA is still the one of the major users of antidumping between developed countries. After the negotiation date of CUSTA in 1988 with Canada and under NAFTA in 1994 with Canada and Mexico, the USA initiated more antidumping investigations against Mexico but less AD investigations against Canada. After NAFTA the USA has initiated less antidumping investigation against the rest of the world.

Brazil is the one of the major users of antidumping in recent years. Brazil's use of antidumping measures increased as the country integrated to its trade liberalization programme in the 1990s. After MERCOSUR in 1994 between Argentina and Uruguay, Brazil initiated slightly more antidumping investigations. In recent years, most of the AD investigations were against China and Russia. In Brazil the AD investigations concentrated into industries such as; chemicals, steel, agricultural products and manufactures. In Brazil only 46% of the cases resulting in the application of antidumping duties involved provisional measures.

The econometric model is constructed by using Poisson regression model because of the dependent variable initiations are ranging from zero to a count variable. FTA agreements are used as dummy variable to see the significance on the use of AD investigations against the trading partners. From the estimation outcomes, dummy variables for the USA-Canada is significant with a negative coefficient sign whereas dummy variable for the USA-Mexico is also significant with a positive coefficient sign. In this case the both estimations are statistically and economically are significant. Both cases are consistent with the theory: We expect less antidumping investigations initiated against Canada, but more initiations against Mexico by the

USA. On the other hand dummy variable for Brazil and Argentina is not significant but with a positive coefficient because the number of initiations is very small.

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APPENDIX- Estimation Outcomes

TABLE A

Explanatory Variables		Dependent Variable : Number of Antidumping Investigations Initiated by the USA against Canada 1980-2006		
Number of Observation		16 after adjustments		
R –square		57%		
Explanatory Variables	Coefficient	z-statistic	p-value	
Constant	-6.592	-1.558	0.119	
Imports in <i>t-1</i>	0.463	1.357	0.174	
Damage to the domestic importing industry	-0.217	-0.069	0.658	
Exports in <i>t-1</i>	0.514	1.277	0.201	
Potential threat to the domestic exporting industry	0.615	0.864	0.387	
Dummy	-1.385	-2.357	0.0184**	
LR-Statistic				6.6700
Loglikelihood				-43.095

* *significant at 5% significance level

TABLE B

Explanatory Variables	Dependent Variable : Number of Antidumping Investigations Initiated by the USA against Mexico 1980-2006		
Number of Observation	14 after adjustments		
R –square	57%		
Explanatory Variables	Coefficient	z-statistic	p-value
Constant	-1.387*	-2.947	0.0032
Imports in <i>t</i>	0.494	0.419	0.6747
Damage to the Domestic importing industry	-0.469	-0.415	0.6776
Exports in <i>t</i>	0.832	0.638	0.5235
Potential threat to the Domestic exporting industry	-1.478	-1.244	0.2133
Dummy	3.330**	-1.405	0.0451
LR-Statistic	11.382		
Loglikelihood	-22.6531		

*significant at 1% significance level

**significant at 5% significance level

TABLE C

Explanatory Variables	Dependent Variable : Number of Antidumping Investigations Initiated by the Brazil against Argentina 1988-2006		
Number of Observation	19		
R –square	23%		
Explanatory Variables	Coefficient	z-statistic	p-value
Constant	-4.835	-0.177	0.8592
Imports	-2.567	3.819	0.5016
Damage to the domestic importing industry in <i>t</i>	-2.500	-1.182	0.2369
Exports in <i>t</i>	2.858	0.936	0.3492
Potential threat to the domestic exporting country in <i>t</i>	0.735	1.865	0.0621***
Dummy	1.282	-0.481	0.6303
LR-Statistic	2.6532		
Loglikelihood	-7.2108		