ISRAEL – COLOMBIA

JOINT STUDY ON THE

FEASIBILITY OF AN FTA

December 2011

Table of Contents

1. PREAMBLE

In light of their shared interest to promote bilateral trade and enhance economic cooperation, Colombia and Israel have recently engaged in a dialogue with an aim to establish a comprehensive Free Trade Area agreement. The parties have decided to conduct a joint feasibility study in order to analyze the effects such agreement would have on the bilateral trade and relations. The results, as detailed below, have indicated that an FTA would benefit both sides.

The findings of the study are based on several tests, including the World Bank's SMART model, Gravitational model, Competitive Supply - Demand Match and Trade Potential models.

In addition to the expected increase in terms of trade in goods and services, the agreement is likely to enhance bilateral economic cooperation, remove non-tariff trade barriers and foster diplomatic and cultural ties between both nations.

2. BILATERAL TRADE DATA

2.1 Trade information based on Colombian data

- In 2010, bilateral trade between Colombia and Israel reached US$ 536 million, the highest in the history.
- Trade with Israel represented 0.7% of Colombia's total trade. Israel's lowest share in the Colombian global trade was 0.4% in 1999 and 2000.
- Between 2001 and 2010, trade with Israel has grown at a rate of 17% annually, almost 4% higher than the growth rate for the total Colombian trade.

Trade in goods between Colombia and Israel (1996-2010)
US $ million

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Israel															
Exports	45	68	88	53	30	77	89	89	104	198	188	168	196	173	274
Imports (FOB)	60	75	86	43	62	53	75	69	96	96	132	159	162	210	261
Balance	-15	-7	1	10	-32	25	14	20	8	102	56	8	34	-37	13
Total trade	106	143	174	96	92	130	164	159	201	294	320	327	358	383	536
Colombia's Global															
Exports	10.648	11.549	10.866	11.617	13.158	12.330	11.975	13.129	16.788	21.190	24.391	29.991	37.626	32.853	39.820
Imports (FOB)	12.792	14.369	13.768	9.991	10.998	11.997	11.891	13.022	15.626	19.799	24.534	30.816	37.155	31.188	38.351
Balance	-2.144	-2.820	-2.902	1.626	2.161	333	84	106	1.162	1.392	-143	-824	470	1.665	1.469
Total trade	23.439	25.918	24.634	21.608	24.156	24.327	23.867	26.151	32.415	40.989	48.925	60.807	74.781	64.041	78.170
Share (%)															
Exports	0,4	0,6	0,8	0,5	0,2	0,6	0,7	0,7	0,6	0,9	0,8	0,6	0,5	0,5	0,7
Imports	0,5	0,5	0,6	0,4	0,6	0,4	0,6	0,5	0,6	0,5	0,5	0,5	0,4	0,7	0,7
Trade	0,5	0,5	0,7	0,4	0,4	0,5	0,7	0,6	0,6	0,7	0,7	0,5	0,5	0,6	0,7

Source: DANE-DIAN- calculations by OEE-Mincomercio

- In the last decade (except 2009 – US$ 37 million) Colombia has had a surplus trade balance with Israel.
- In 2010, that surplus was of US$ 13 million, way lower than the highest surplus registered in 2005 of US$ 102 million.
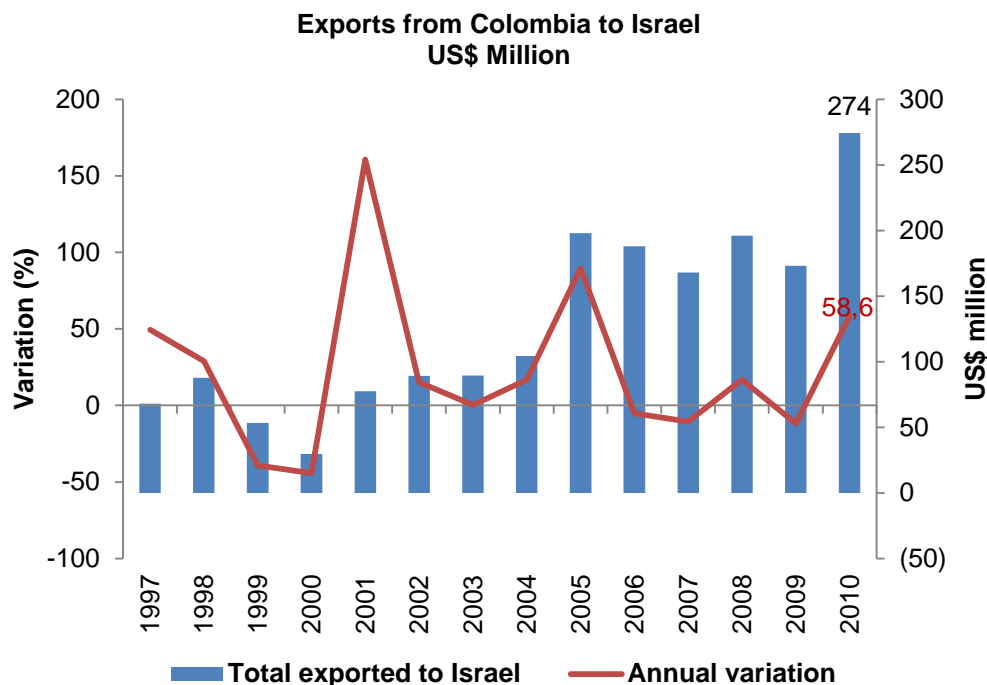
EXPORTS

Exports from Colombia to Israel
US$ Million and %

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Exports to Israel	45	68	88	53	30	77	89	89	104	198	188	168	196	173	274
Total Exports	10.648	11.549	10.866	11.617	13.158	12.330	11.975	13.129	16.788	21.190	24.391	29.991	37.626	32.853	39.820
% of the total	0,4	0,6	0,8	0,5	0,2	0,6	0,7	0,7	0,6	0,9	0,8	0,6	0,5	0,5	0,7

Source: DANE-DIAN- calculations by OEE-Mincomercio

- In 2010, Colombian exports to Israel reached US$ 274 million (a 58.6% increase from 2009), the highest amount sold to that market, way higher than those US$77 million of the beginning of the decade.

- Between 2001 and 2010, Colombian exports to Israel grew at an annual average rate of 15.1%, almost 3% higher than the growth rate for the total Colombian exports.

- Exports to Israel in 2010 represented 0.7% of Colombia's total exports; an increase in comparison with 2008 and 2009 when they represented just the 0.5%.

Exports from Colombia to Israel
US$ Million

- There is no clear evidence of a trend on the exports to Israel, since between 2001 and 2010, there were negative variations in 2006 (-5.1%), 2007 (-10.6%) and 2009 (-11.8%).

Main exports from Colombia to Israel
US$ Million and %

Description	US$ Million			Share(%)		Var(%)
	2008	2009	2010	% in 2009	% in 2010	2010
Coal	156,6	156,5	257,0	90,5	93,7	64,2
Coffee	13,4	4,7	6,9	2,7	2,5	46,8
Parts of airplanes	1,4	2,2	2,4	1,3	0,9	10,0
Parts and weapons accessories	0,5	2,0	1,0	1,1	0,4	-49,5
Flowers	0,7	0,6	1,0	0,4	0,3	55,0
Turbo reactors and other gas turbines.	0,0	0,0	0,8	0,0	0,3	n.a.
Coffee products	0,7	0,2	0,5	0,1	0,2	162,6
Plastic products	0,3	0,5	0,5	0,3	0,2	11,6
Paper of domestic use	1,0	0,7	0,5	0,4	0,2	-19,6
Candies and sweets	0,5	0,5	0,5	0,3	0,2	14,5
Precious stones	0,2	0,1	0,5	0,1	0,2	269,9
Wood products	0,1	0,5	0,5	0,3	0,2	1,2
Plastic containers	0,1	0,1	0,3	0,1	0,1	133,3
Sugar	0,1	0,8	0,2	0,5	0,1	-68,3
Other Wood products	0,0	0,0	0,2	0,0	0,1	n.a.
Subtotal	175,7	169,3	273,0	97,9	99,5	61,2
Others	20,4	3,7	1,4	2,1	0,5	-62,1
Total	196,1	173,0	274,4	100,0	100	58,6

Source: DANE-DIAN- calculations by OEE-Mincomercio

- Exports to Israel are highly concentrated in coal, which reached US$ 257 million in 2010; a 64.2% increase from the previous year.

- Between 2009 and 2010, exports of coal to Israel represented an average of 92% of the total exports from Colombia to that market.

- The second product is coffee with exports of US$ 6.9 million in 2010, an increase of 46.8% in comparison with 2009.

- Regarding non-primary sectors, were important the exports of airplanes parts and accessories, and of weapons, reaching US$ 2,4 million and US$ 1 million respectively, during 2010.

- Flower exports during 2010 reached almost US$ 1 million, a 55% increase from 2009.
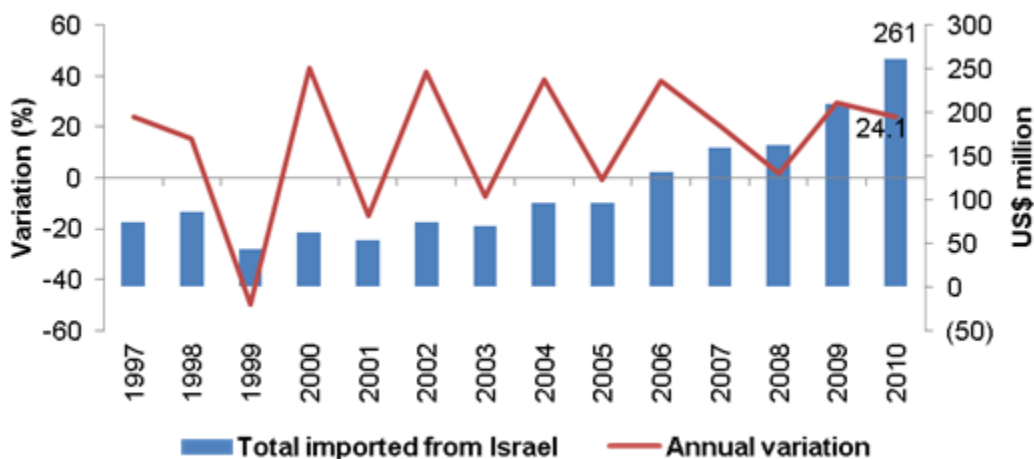
IMPORTS

Imports from Israel (FOB)
US$ Million and %

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Imports (FOB) from Israel	60	75	86	43	62	53	75	69	96	96	132	159	162	210	261
Total Imports	12.792	14.369	13.768	9.991	10.998	11.997	11.891	13.022	15.626	19.799	24.534	30.816	37.155	31.188	38.351
% of the total	0,5	0,5	0,6	0,4	0,6	0,4	0,6	0,5	0,6	0,5	0,5	0,5	0,4	0,7	0,7

Source: DANE-DIAN- calculations by OEE-Mincomercio

- In 2010, Colombian imports from Israel reached US$ 261 million (FOB), an increase of 24.1% from the previous year, a record high of purchases to that country.

Imports from Israel
US$ Million (FOB)

- During the last couple of years, Israel was the origin of 0.7% of Colombia's total imports; in 2001 it only amounted for a 0.4%.
- Between 2001 and 2010, Colombian imports from Israel grew at an annual average rate of 19.4%, almost 6% higher than the growth rate for the total Colombian imports for that period.

Description	US$ million			Share (%)		Var (%)
	2008	2009	2010	% en 2009	% en 2010	2010
Airplanes and other aircrafts	16,3	61,5	86,5	28,6	32,2	40,6
Weapons	37,8	9,8	32,0	4,6	11,9	225,6
Television and broadcasting equipment	14,2	13,8	18,1	6,4	6,7	30,6
Turbo reactors and other gas turbines.	4,9	16,2	14,5	7,5	5,4	-10,3
Liquid crystal and laser devises	9,3	9,9	10,5	4,6	3,9	6,5
Telephone and telegraph electric equipment	10,8	17,9	10,3	8,3	3,8	-42,4
Compasses and other navigational instruments and appliances.	0,1	0,8	9,6	0,4	3,6	1105,1
Parts of airplanes	3,4	5,0	8,1	2,3	3,0	62,1
Parts of weapons	6,4	12,4	6,6	5,8	2,5	-46,6
Parts of equipment for radio, television radars and monitors	1,6	8,5	6,5	3,9	2,4	-22,8
Synthetic filament yarn	5,4	5,3	6,2	2,5	2,3	18,1
Surgery, odontology and veterinary instruments	4,6	2,2	4,9	1,0	1,8	119,6
Wire, cable and other insulated electric conductors	2,9	2,6	3,7	1,2	1,4	42,6
Heterocyclic compounds with Heterotermes (s) of nitrogen	3,4	3,4	3,0	1,6	1,1	-10,7
Printing machinery and equipment	2,5	1,3	2,9	0,6	1,1	120,5
Radar apparatus, radio navigational radio remote	1,0	2,4	2,8	1,1	1,0	17,2
Plates, sheets and strip, of plastics, no cellular	2,4	1,4	2,5	0,7	0,9	70,3
Orthopedic appliances, including belts and bandages	1,0	1,6	2,0	0,7	0,8	25,8
Computers	3,5	1,6	2,0	0,8	0,7	21,4
Paper of domestic use	1,7	0,9	1,5	0,4	0,6	67,1
Subtotal	133,2	178,6	234,2	83,1	87,3	31,2
Others	35,5	36,3	34,2	16,9	12,7	-5,9
Total	168,7	214,9	268,4	100,0	100,0	24,9

Source: DANE-DIAN- calculations by OEE-Mincomercio

- The main imported products from Israel are airplanes and other aircrafts reaching a value of US$ 86.5 million in 2010, an increase of 40.6% in respect to the previous year. Those products account for 32.2% of the total purchases to that country.

- Then there are the purchases of weapons, which in 2010 reached US$ 32 million, with an increase of 225% in comparison with 2009.

- They are also important, the purchases of parts of airplanes and weapons, which together accounted for US$ 14.7 million in 2010.

FOREING DIRECT INVESTMENT (FDI)

- Between 2001 and 2010, Israel's FDI in Colombia reached US$ 27.8 million, representing 0.05% of the total FDI in the country for that period.

- Colombia does not register any FDI in Israel.

## 2.2   Trade information based on Israeli data[1]

Trade in Goods 1996-2010 – General

- The bilateral trade reached its peak in 2007, with US$ 770 million.

- On average, Imports originating from Colombia represent 0.5% of Israel's total imports; Israeli exports to Colombia represent 0.3% of Israel's exports to the world.

- During the last 15, years an average trade deficit of US$ 130 million was recorded from Israel's perspective, with the exception of 2000, when a trade surplus of 0.3 million was recorded.

- Israel's growth in exports over this period was relatively steady, averaging 13% annually. On the other hand, Colombia's imports to Israel fluctuated more dramatically, with an average growth per year of 33%.

Trade in goods between Colombia and Israel (1996-2010) in $USD millions

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Exports	19,305	21,009	21,282	23,585	29,077	26,528	26,360	28,373	34,159	37,074	39,967	46,232	50,774	41,913	51,018
Exports to Colombia	54	69	69	34	48	50	59	68	86	84	161	180	163	170	170
% of total exports	0.3%	0.3%	0.3%	0.1%	0.2%	0.2%	0.2%	0.2%	0.3%	0.2%	0.4%	0.4%	0.3%	0.4%	0.3%
Total Imports	29,753	28,710	27,521	31,057	34,452	33,305	33,243	34,456	41,200	41,161	50,465	58,524	65,732	48,240	59,560
Imports from Colombia	58	92	112	92	48	86	140	108	124	468	478	591	413	210	400
% of total imports	0.2%	0.3%	0.4%	0.3%	0.1%	0.3%	0.4%	0.3%	0.3%	1.1%	0.9%	1.0%	0.6%	0.4%	0.7%
Total bilateral trade	112	161	181	126	95	136	199	176	210	552	639	770	575	380	570
Trade Balance	-4	-24	-43	-59	0	-36	-82	-40	-38	-383	-317	-411	-250	-41	-229

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[1] Source: Malam, based on data from the Israeli Customs Authority
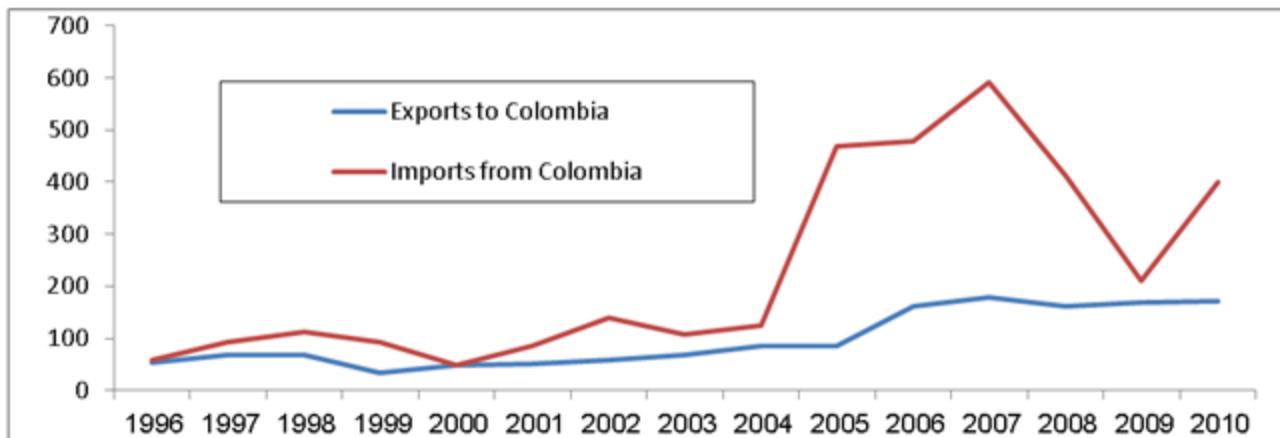
Exports to Colombia by Sector

- Mechanical and Electric Machinery & Appliances accounted for 60.1% of Israel's exports to Colombia in 2010. This sector has recovered from the decline of exports in 2009 compared to the previous year, and in 2010 picked up beyond pre-crisis levels, totaling US$ 102.5 Million.

- Optics & Laboratory Equipment is the second most important export sector to Colombia. A steady growth was recorded through the past three years, from US$ 9.4 million in 2008 to US$ 22.2 million in 2010. In terms of share of exports, this sector rose from 5.8% in 2008 to 13.0% in 2010.

- Weapons accounted for 8.9% of Israel's exports to Colombia, amounting US$ 15.2 million in 2010. This sector has witnessed a steady decline during the past three years; in 2008 it accounted for 19.4% of the exports to Colombia with US$ 31.6 Million.

Exports to Colombia from Israel in USD						
Sector	**US$ dollars**			**Share (%)**		
	2008	**2009**	**2010**	**2008**	**2009**	**2010**
Mechanical & Electric Machinery & appliances	79,109,115	66,840,589	102,481,947	48.7%	39.4%	60.1%
Optics & Laboratory equipment	9,392,022	17,568,825	22,233,853	5.8%	10.4%	13.0%
Weapons	31,573,308	23,246,895	15,163,086	19.4%	13.7%	8.9%
Textile & Footwear	6,748,064	6,954,686	8,044,420	4.2%	4.1%	4.7%
Minerals, Chemicals, Fertilizers & Paints	10,864,617	10,033,453	7,500,183	6.7%	5.9%	4.4%
Plastic & Rubber	5,571,459	5,294,107	4,884,797	3.4%	3.1%	2.9%
Other	3,694,345	1,990,733	4,312,208	2.3%	1.2%	2.5%
Base Metals, Stone products & Glass	2,328,689	1,759,548	1,759,548	1.4%	1.0%	1.0%
Wood & Paper	72,062	637,047	889,778	0.0%	0.4%	0.5%
Animals, Food & Agriculture	1,758,727	2,074,922	1,961,832	1.1%	1.2%	1.2%
Transportation Equipment	10,528,737	32,139,504	266,328	6.5%	19.0%	0.2%
Wood & Paper	137,710	192,435	47,269	0.1%	0.1%	0.0%
Diamonds & Precious stones	5,133	37,309	824	0.0%	0.0%	0.0%
Non-metallic Mineral Products	569,141	748,356	918,921	0.4%	0.4%	0.5%
Total	**162,353,129**	**169,518,409**	**170,464,994**			

Imports from Colombia by Sector

- 97.1% of the total imports from Colombia in 2010 were coal, amounting to US$ 388.4 millions.

- The second most important import from Colombia is coffee, representing 1.6% of the share of imports and totaling US$ 6.4 millions in 2010, less than half of the total imports of coffee from Colombia in 2008.

Imports from Colombia to Israel						
Sector	US Dollars			Share (%)		
	2008	2009	2010	2008	2009	2010
Minerals, Chemicals, Fertilizers & Paints	393,697,027	197,077,522	388,395,665	95.4%	93.7%	97.1%
Animals, Food & Agriculture	13,400,550	6,899,535	6,359,934	3.2%	3.3%	1.6%
Wood & Paper	1,517,581	1,306,076	1,913,227	0.4%	0.6%	0.5%
Plastic & Rubber	774,579	888,271	1,013,803	0.2%	0.4%	0.3%
Base Metals, Stone products & Glass	1,031,877	2,283,065	917,105	0.2%	1.1%	0.2%
Mechanical & Electric Machinery & appliance	187,635	362,625	339,612	0.0%	0.2%	0.1%
Textile & Footwear	696,092	253,085	310,720	0.2%	0.1%	0.1%
Transportation Equipment	586,568	838,577	282,742	0.1%	0.4%	0.1%
Optics & Laboratory equipment	469,488	88,398	132,617	0.1%	0.0%	0.0%
Electronics & Components	41,946	85,695	104,349	0.0%	0.0%	0.0%
Communication	231,280	166,352	48,428	0.1%	0.1%	0.0%
Toys, Furniture, Art, Musical instruments	72,352	37,078	44,293	0.0%	0.0%	0.0%
Other	69,169	31,099	36,312	0.0%	0.0%	0.0%
Diamonds & Precious stones	72,167	55,225	588	0.0%	0.0%	0.0%
Cosmetics, Waxes & Soap materials	8	55	191	0.0%	0.0%	0.0%
Total	412,848,319	210,372,658	399,899,586			

3. EXPECTED TRADE RELATED EFFECTS OF AN FTA BETWEEN ISRAEL AND COLOMBIA

3.1 Colombian Study

This analysis includes three different instruments:

1. WITS's (World Integrated Trade Solution) SMART Model, developed by the World Bank.
2. A Gravitational Model
3. Competitive Supply – demand match

3.1.1 SMART Model

A partial equilibrium model, which simulates a bilateral tariff reduction in goods based on trade and tariff data of 2009. This simulation can overestimate the effects on Israel's exports, bearing in mind that Colombia recently passed (2010) a tariff reform, by cutting the average tariff in almost 4 percent (from 12.2% to 8.3%).

The simulation maintains the original elasticity. Table 1 shows the 25 sectors of Israel's exports with the highest positive impact.

Total exports increases 15% in real terms, equivalent to US$32 million in 2009. 44% of the total amount is "trade creation", and the other 54% is trade diversion. This means that once the FTA enters into force, Israel business can displace current suppliers in the Colombian market. That is likely to happen in sectors such as Electric Machinery, Airplanes, Military Equipment, Plastics, Paper and Chemicals.

Table 2 shows the main sectors of Colombian exports which will benefit the most from the FTA.

The Colombian exports increase is much lesser. A 2% growth equivalent to a little bit more than US$ 1 million. This is due to the fact that our main exports to Israel are concentrated on oil and coffee, which already have a 0% tariff upon entry. 66% of the increase on exports is related to "trade creation".

Table 1: Change of Israel's exports to Colombia				
Product HS Code	**Description**	**Trade Total Effect in 1000 USD**	**TradeCreati onEffect in 1000 USD**	**Trade Diversion Effect in 1000 USD**
85	Electrical mchy equip parts thereof; sound record	7,307	3,047	4,260
88	Aircraft, spacecraft, and parts thereof.	6,901	3,279	3,622
93	Arms and ammunition; parts and accessories thereo	6,859	3,190	3,669
84	Nuclear reactors, boilers, mchy & mech appliance;	2,817	1,078	1,739
90	Optical, photo, cine, meas, checking, precision,	1,746	708	1,038
54	Man-made filaments.	1,546	703	842
39	Plastics and articles thereof.	1,431	587	843
48	Paper & paperboard; art of paper pulp, paper/pape	485	256	230
36	Explosives; pyrotechnic prod; matches; pyrop allo	398	262	136
29	Organic chemicals.	378	152	227
28	Inorgn chem; compds of prec mtl, radioact element	330	161	169
06	Live tree & other plant; bulb, root; cut flowers	184	106	78
40	Rubber and articles thereof.	167	56	111
32	Tanning/dyeing extract; tannins & derivs; pigm et	164	36	128
68	Art of stone, plaster, cement, asbestos, mica/sim	142	62	80
30	Pharmaceutical products.	130	44	86
38	Miscellaneous chemical products.	128	39	89
83	Miscellaneous articles of base metal.	117	40	77
65	Headgear and parts thereof.	103	26	77
12	Oil seed, oleagi fruits; miscell grain, seed, fru	95	40	55
81	Other base metals; cermets; articles thereof.	79	69	10
33	Essential oils & resinoids; perf, cosmetic/toilet	75	24	51
63	Other made up textile articles; sets; worn clothi	68	37	31
73	Articles of iron or steel.	55	22	33
13	Lac; gums, resins & other vegetable saps & extrac	51	26	26

Product HS Code	Description	Trade Total Effect in 1000 USD	Trade Creation Effect in 1000 USD	Trade Diversion Effect in 1000 USD
	Table 2: Change of Colombia's exports to Israel			
61	Art of apparel & clothing access, knitted or croc	429	398	30
48	Paper & paperboard; art of paper pulp, paper/pape	130	56	73
29	Organic chemicals.	100	52	49
39	Plastics and articles thereof.	100	41	58
84	Nuclear reactors, boilers, mchy & mech appliance;	94	72	22
44	Wood and articles of wood; wood charcoal.	81	61	20
17	Sugars and sugar confectionery.	78	28	50
70	Glass and glassware.	54	22	32
21	Miscellaneous edible preparations.	24	9	14
94	Furniture; bedding, mattress, matt support, cushi	21	8	13
60	Knitted or crocheted fabrics.	18	10	8
85	Electrical mchy equip parts thereof; sound record	11	5	6
62	Art of apparel & clothing access, not knitted/cro	10	4	6
03	Fish & crustacean, mollusc & other aquatic invert	10	4	6
90	Optical, photo, cine, meas, checking, precision,	6	2	3
69	Ceramic products.	4	2	2
38	Miscellaneous chemical products.	3	1	1
30	Pharmaceutical products.	2	1	1
42	Articles of leather; saddlery/harness; travel goo	2	1	1
68	Art of stone, plaster, cement, asbestos, mica/sim	1	1	1
73	Articles of iron or steel.	1	1	0
58	Special woven fab; tufted tex fab; lace; tapestri	1	0	0
95	Toys, games & sports requisites; parts & access t	1	0	0

Since the SMART model is based on current trade, the most impacted sectors are the ones on which there are already trade. Therefore, we need to run additional exercises.

3.1.2 Gravitational Model

The Ministry of Trade, Industry and Tourism hired a research institute to build a Gravitational Model to assess the impact of the Colombia-USA FTA. With this model, we can estimate potential trade (exports plus imports) between two countries.

The model specification is the following for each year (leaving our sub index t):.

$$\ln X_{ij} = \beta_o + \beta_1 \ln D_{ij} + \beta_2 \ln(Y_i Y_j) + \beta_3 \ln(y_i y_j) + \beta_4 \ln(A_i A_j) + \beta_5 Leng_{ij} + \beta_6 Front_{ij} + \beta_7 Mediter_{ij}$$
$$+ \beta_8 Isla_{ij} + \beta_9 ColCom_{ij} + \beta_{10} ColAct_{ij} + \beta_{11} Colonia_{ij} + \beta_{12} NacCom_{ij} + \beta_{13} M_{ij} + \beta_{14} TLC_{ij}$$
$$+ \beta_{15} SGP_{ij} + \beta_{16} WTO1_{ij} + \beta_{17} WTO2_{ij} + \varphi T + \varepsilon_{ij}$$

Where X_{ij} is the bilateral trade (exports plus imports) between the two countries; i y j, D is the circular distance between the main cities of each country, Y is the GDP and y *is the GDP per cápita*, A is the area of the country. The other variables are dichotomic or binary; *Leng* if the countries share the language, *Front* if

they have a common border, *Mediter* if one of them does not have coasts, *Isla* if one of them are an island, *ColCom* if both countries were a colony from the same colonizer, *ColAct* if one of them is a colony from the other, *Colonia* if one of them were colony form the other, *NacCom* if both countries are part of the same Nation, *M* if they have a common currency, *TLC* if the countries have an FTA or are members of an a Regional Agreement, *SGP* if one of them grants preferential access to the other, *WTO1* if one of the countries is member of the WTO, *WTO2* if both countries are members of the WTO, and y *T* a control variable to take account of the global economic environment each year.

The relationship with 178 countries was estimated with this model, using trade bilateral data between 1948 and 1999.

The potential impact is measured by using the potential bilateral trade estimated in the model and the bilateral trade seen in 2009.

The Gravitational Model shows that current bilateral trade between Colombia and Israel is less than half the potential. This means that the FTA would increase the bilateral trade in 138%. Such results are much higher than the one obtained using the SMART Model, due to the fact this one estimates the long term dynamic effects such as the factors reallocation and attraction of more investments, and takes into consideration a period of almost 50 years.

3.1.3 Competitive Supply – Demand Match

Bearing in mind that the exports and imports flows with Israel are relatively small and that the trade composition does not reflect the export potential, we need to identify the products with the highest potential as a result of the FTA. The potential trade was estimated in accordance with the following methodology:

a. Using data of Colombian average exports and imports of 2008-2010 by tariff subheadings (Harmonized System 6 digits). From that sample, the tariff subheadings with low levels of trade (less than US$ 1 million per line) were eliminated, except those on which there is trade from Israel.

b. Then we estimate the Relative Trade Balance Index (RTBI) by tariff line (6 digits): (Xi-Mi) / (Xi+Mi), both for Colombia and Israel.

c. With that, we created an indicator based in the subtraction of both countries' Trade Balance RTBI (+) = RTB (Col) – RTB (Isr). The result is sorted in descending (from +2 to -2), with positive results tariff subheadings in which Colombia is competitive and, on the contrary, negative results Israel is competitive.

d. Tariff subheadings in which both countries are net importers were eliminated, RTBi + --1.0, as well as those subheadings related to Colombian exports of oil and its derivates and coal.

e. From those results, we found that values between 2.0 and 0.35 correspond to goods that are sensitive for both economies, since both countries are net exporters of goods included in those tariff subheadings.

f. To Colombia, the results with RTB (+) between 2.0 and 0.35 were pondered by their share in the total trade. A similar exercise was produced with Israel´s trade.

g. Once the potential goods that could be exported were identified, we passed them through the indicator of Revealed Comparative Advantage Index, defined as:

$$RCA = \frac{X_i / X_T^{Col}}{X_i^W / X_T^W}$$

h. Where:

RCAI = Revealed Comparative Advantage Index;

X_i = Exports of the product (tariff subheading);

X_T^{Col} = Colombian total exports;

X_i^W = World exports by tariff subheading;

X_T^W = World exports;

With this exercise, we were able to identify a list of goods where Colombia has a trade surplus, and, at the same time has a Revealed Comparative Advantage. Again, a similar exercise was conducted with Israel's data.

To arrange those goods identified as sensitive (-0.35 < RTBi (+) < +0.35), they were by trade on each subheading, in accordance with the following:

$$\frac{1}{X_i^{Col} + X_i^{Isr}} + VAB[RTBi(+)]$$

Where:

VAB = absolute value of the RTBI (+). While closer to ZERO, the higher the estimated sensitivity.

Such exercise identifies those products with "export potential" in each country, as well as those products that are sensitive in an eventual Free Trade Agreement. It does not reflect the increase in exports from each country, because this result depends on the use of the FTA.

Results

The exercise shows that Colombia has an "exporter potential" in 664 products. The following chart displays the main 50.

HS	Description	Index
COLOMBIA POTENTIAL EXPORTS		
First 50 items		
HS	**Description**	**Index**
720260	Ferro-nickel, in granular/powder form	915.9
090111	Coffee, not roasted, not decaffeinated	694.4
321290	Pigments (incl. metallic powders & fla	27.9
210111	Extracts, essences & concentrates of	27.3
151110	Palm oil, crude	22.8
710391	Rubies, sapphires & emeralds, worked	21.0
730629	Casing & tubing of a kind used in drillir	19.5
820840	Knives & cutting blades, for machines	17.1
390410	Poly(vinyl chloride), not mixed with an	14.9
170199	Cane/beet sugar & chemically pure su	13.2
170490	Sugar confectionery other than chewir	11.4
151321	Palm kernel/babassu oil, crude	11.2
820140	Axes, bill hooks & similar hewing tools	9.6
700312	Cast glass & rolled glass, in non-wired	9.5
051110	Bovine semen	8.6
320641	Ultramarine & preparations based the	7.1
251741	Granules, chippings & powder, of mar	6.9
390430	Vinyl chloride-vinyl acetate copolyme	6.8
721041	Flat-rolled products of iron/non-alloy	6.5
481840	Sanitary towels & tampons, napkins &	6.3
600410	Knitted/crocheted fabrics of a width >	5.3
410792	Leather further prepared after tannin	5.2
310260	Double salts & mixtures of calcium nit	5.0
170410	Chewing gum, whether/not sugar-coat	4.5
640620	Outer soles & heels, of rubber/plastic	4.2
410799	Leather further prepared after tannin	3.9
848050	Moulds for glass	3.1
960200	Worked vegetable/mineral carving ma	3.1
390230	Propylene copolymers, in primary forr	2.9
620342	Men's/boys' trousers, bib & brace ove	2.8
681320	Friction material & articles thereof (e	2.6
071331	Beans of the species Vigna mungo (L.)/	2.5
691010	Ceramic sinks, wash basins, wash bas	2.3
521143	Woven fabrics of cotton, containing <8	2.2
721050	Flat-rolled products of iron/non-alloy	2.1
291814	Citric acid	2.0
170111	Cane sugar, raw, in solid form, not con	1.9
621210	BrassiFres & parts thereof, whether/r	1.9
841810	Combined refrigerator-freezers, fitted	1.6
350300	Gelatin, incl. gelatin in rectangular (in	1.5
690590	Chimney-pots, cowls, chimney liners,	1.5
030613	Shrimps & prawns, whether/not in she	1.4
480256	Paper&paperboard, not containing fib	1.4
251520	Ecaussine & other calcareous monum	1.4
490191	Dictionaries & encyclopaedias, & seri	1.3
252329	Portland cement (excl. white cement,	1.3
110220	Maize (corn) flour	1.3
320620	Pigments & preparations based on ch	1.2
850710	Electric accumulators, incl. separator	1.2
600632	Knitted/crocheted fabrics, n.e.s. in Ch	1.2
Source: MCIT		

In the case of Israel, there are 784 products with "exporter potential.

ISRAEL POTENCIAL EXPORTS		
First 50 Items		
HS	Description	Index
710239	Diamonds, non-industrial other than u	-695.5
310590	Mineral/chemical fertilisers containir	-182.6
285300	Other inorganic compounds (including	-37.3
382490	Chemical products&preparations of tl	-35.9
851769	Other apparatus for transmission/rec	-35.5
820900	Plates, sticks, tips & the like for tools,	-16.5
310310	Superphosphates	-16.0
290899	Halogenated/sulphonated/nitrated/n	-12.3
902221	Apparatus based on the use of alpha/l	-11.6
300490	Medicaments (excluding goods of hea	-11.2
280130	Fluorine	-10.8
852719	Radio-broadcast receivers capable of	-10.4
851989	Other sound recording/reproducing ap	-10.3
300390	Medicaments (excluding goods of hea	-9.9
880390	Parts of goods of 88.01/88.02, n.e.s. ir	-7.2
854232	Electronic integrated circuits, memor	-6.8
844319	Offset printing machinery (excl. of 844	-6.7
903149	Other optical instruments & applianc	-6.7
600533	Warp knit fabrics. incl. those made on	-6.1
901819	Electro-diagnostic apparatus used in r	-5.7
540249	Yarn other than high tenacity/texture	-5.7
852792	Other reception apparatus for radio-b	-5.0
282751	Bromides of sodium/potassium	-4.9
851770	Parts of telephone sets, incl. telephor	-4.7
280920	Phosphoric acid & polyphosphoric aci	-4.7
170250	Chemically pure fructose	-4.6
842481	Mechanical appliances (excl. of 8424.	-3.3
880330	Parts of aeroplanes/helicopters, othe	-3.2
681019	Tiles, flagstones & similar articles (ex	-3.1
902290	X-ray generators (excl. tubes), high ter	-3.1
901310	Telescopic sights for fitting to arms	-3.1
380893	Herbicides, anti-sprounting products&	-3.0
281610	Hydroxide & peroxide of magnesium	-3.0
380899	Rodenticides&other biocides, n.e.s.,p	-2.9
853110	Burglar/fire alarms & similar apparatu	-2.9
853339	Wirewound variable electrical resisto	-2.7
392061	Plates, sheets, film, foil & strip, of poly	-2.6
310560	Mineral/chemical fertilisers containir	-2.6
810411	Unwrought magnesium, containing at	-2.2
854231	Electronic integrated circuits, proces:	-2.1
080410	Dates, fresh/dried	-2.0
847190	Magnetic/optical readers, machines f	-1.8
392490	Household articles & toilet articles (e	-1.7
930690	Bombs, grenades, torpedoes, mines, r	-1.6
845939	Boring-milling machines other than wa	-1.4
282731	Magnesium chlorides	-1.4
847329	Parts & accessories (excl. covers, carr	-1.3
281530	Peroxides of sodium/potassium	-1.3
282990	Perchlorates	-1.3
851718	Other telephone sets, incl. telephone	-1.3
Source: MCIT		

We also identified 1.178 tariff subheadings where both countries are exporters:

COLOMBIA - ISRAEL SENSITIVE PRODUCTS		
First 50 Items		
HS	**Description**	**Index**
848079	Moulds for rubber/plastics, other than	-0.352
880320	Under-carriages & parts thereof , of go	-0.351
844839	Parts & accessories of the machines o	-0.349
283699	Carbonates(excl. of 2836.20-2836.92)	-0.348
392329	Sacks & bags (incl. cones), of plastics o	-0.346
871310	Carriages for disabled persons, not mo	-0.344
920590	Other wind musical instruments (eg. c	-0.344
848390	Toothed wheels, chain sprockets & ot	-0.343
853720	Boards, panels, consoles, desks, cabin	-0.342
845819	Horizontal lathes (incl. turning centres	-0.340
851150	Generators other than starter motors	-0.339
841490	Parts of the pumps, compressors, fans	-0.338
621790	Parts of garments/clothing accessorie	-0.336
293211	Tetrahydrofuran	-0.333
901812	Ultrasonic scanning apparatus	-0.328
851511	Soldering irons & guns	-0.326
853690	Electrical apparatus for switching/pro	-0.326
411330	Leather further prepared after tannin	-0.326
281820	Aluminium oxide (excl. artificial corun	-0.324
290339	Fluorinated/brominated/iodinated de	-0.323
852580	Television cameras, digital cameras &	-0.323
843069	Moving/grading/levelling/scraping/ex	-0.322
851981	Other sound recording/reproducing a	-0.316
842951	Self-propelled front-end shovel loader	-0.312
340219	Organic surface-active agents, wheth	-0.311
841899	Parts of the refrigerating/freezing equ	-0.309
844331	Machines which perform two/more of	-0.309
852329	Magnetic media for the recording of so	-0.306
871499	Parts & accessories of the vehicles of	-0.305
940110	Seats of a kind used for aircraft	-0.302
290949	Ether-alcohols & their halogenated/su	-0.302
847050	Cash registers	-0.302
200830	Citrus fruit, prepared/preserved, whe	-0.301
230400	Oil-cake & other solid residues, wheth	-0.300
392290	Bidets, lavatory pans, flushing cistern	-0.300
847790	Parts of Machinery for working rubber	-0.299
291219	Acyclic aldehydes without other oxyge	-0.299
850650	Primary cells & primary batteries, lith	-0.299
901780	Instruments for measuring length, for	-0.298
841221	Linear acting (cylinders) hydraulic pov	-0.298
901832	Tubular metal needles & needles for s	-0.298
842919	Self-propelled bulldozers & angledoze	-0.297
390110	Polyethylene having a sp.gr. of <0.94, i	-0.295
283529	Phosphates (excl. of 2835.22-2835.26	-0.295
401199	New pneumatic tyres, of rubber (excl.	-0.293
722599	Other n.e.s. in 72.25, flat-rolled produ	-0.291
160419	Fish (excl. of 1604.11-1604.16), prepa	-0.290
300620	Blood-grouping reagents	-0.289
293319	Heterocyclic comps. containing an un	-0.288
160420	Prepared/preserved fish other than w	-0.286
Source: MCIT		

3.2. Israeli Study

Trade Related effects of an FTA between Colombia and Israel

This chapter includes a simulated prediction of the trade effect bilateral tariff elimination between Israel and Colombia would have on both trading parties.

The analysis includes three different instruments:

- WITS's (World Integrated Trade Solution) SMART Model, developed by the World Bank;
- A Trade Potential Model;
- An empirical analysis of FTAs effect on Israel's exports.

3.2.1   SMART Model

A partial equilibrium model, which simulates a bilateral tariff reduction in goods based on trade and tariff data of 2009. This simulation can overestimate the effects on Israel's export, bearing in mind that the Colombian government has recently passed (2010) a tariff reform, by cutting the average tariff by almost 4 percent (from 12.2% to 8.3%).

The simulation maintains the original elasticity. Two simulations were calculated, examining the effect an immediate and complete bilateral tariff reduction would have on **both countries' exports** to one another.

Table 1 shows the value of Israel's export to Colombia, before and after the bilateral tariff reduction in the 20 main product groups of said exports.

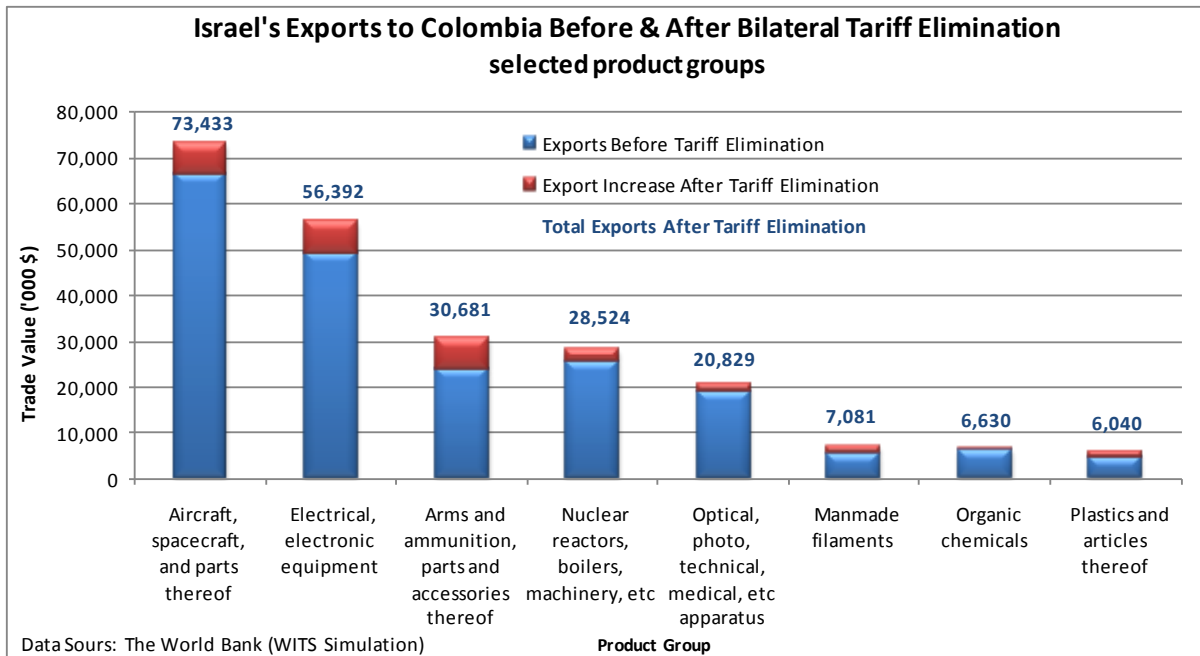| Table 1: Estimated Change in Israel's Export to Colombia				
Product Code (2 Digits)	Product Description	Exports Before FTA ('000$)	Exports After FTA ('000$)	Estimated Exports Increase Due to FTA ('000$)
88	Aircraft, spacecraft, and parts thereof	66,532.1	73,432.9	6,900.7
85	Electrical, electronic equipment	49,085.0	56,391.9	7,306.9
93	Arms and ammunition, parts and accessories thereof	23,822.5	30,681.2	6,858.7
84	Nuclear reactors, boilers, machinery, etc	25,707.6	28,524.5	2,816.8
90	Optical, photo, technical, medical, etc apparatus	19,082.6	20,828.6	1,746.0
54	Manmade filaments	5,535.1	7,080.7	1,545.6
29	Organic chemicals	6,252.0	6,630.3	378.3
39	Plastics and articles thereof	4,609.1	6,039.7	1,430.6
06	Live trees, plants, bulbs, roots, cut flowers etc	1,743.7	1,927.6	183.8
28	Inorganic chemicals, precious metal compound, isotopes	1,449.0	1,778.8	329.8
36	Explosives, pyrotechnics, matches, pyrophorics, etc	1,204.9	1,603.4	398.4
48	Paper & paperboard, articles of pulp, paper and board	962.3	1,447.7	485.3
30	Pharmaceutical products	917.2	1,046.8	129.6
38	Miscellaneous chemical products	854.6	982.6	128.1
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	820.8	916.2	95.4
32	Tanning, dyeing extracts, tannins, derivs,pigments etc	692.3	856.8	164.4
68	Stone, plaster, cement, asbestos, mica, etc articles	648.4	790.5	142.0
40	Rubber and articles thereof	592.0	758.8	166.9
83	Miscellaneous articles of base metal	456.4	573.9	117.5
65	Headgear and parts thereof	314.3	417.0	102.7
Other Product Groups		3,005.1	3,775.5	770.4
Total Exports		214,287.1	246,485.2	32,198.1

Total exports from Israel to Colombia increases by 15% in nominal terms, equivalent to US$ 32 million in 2009. 44% of the total amount is "trade creation", and the other 56% is "trade diversion". This means that once the FTA enters into force, Israeli business can displace current suppliers in the Colombian market.

Table 2 demonstrates the estimated increase in Israel's exports to Colombia divided into trade diversion and creation.

Product Code (2 Digits)	Product Description	Trade Creation Effect ('000$)	Trade Diversion Effect ('000$)	Total Trade Effect ('000$)
Table 2: Estimated Change in Israel's Export to Colombia- Trade Diversion & Creation				
85	Electrical, electronic equipment	3,047.3	4,259.6	7,306.9
88	Aircraft, spacecraft, and parts thereof	3,278.8	3,621.9	6,900.7
93	Arms and ammunition, parts and accessories thereof	3,189.7	3,669.0	6,858.7
84	Nuclear reactors, boilers, machinery, etc	1,078.1	1,738.7	2,816.8
90	Optical, photo, technical, medical, etc apparatus	708.1	1,037.9	1,746.0
54	Manmade filaments	703.2	842.4	1,545.6
39	Plastics and articles thereof	587.3	843.3	1,430.6
48	Paper & paperboard, articles of pulp, paper and board	255.8	229.6	485.3
36	Explosives, pyrotechnics, matches, pyrophorics, etc	262.0	136.4	398.4
29	Organic chemicals	151.6	226.7	378.3
28	Inorganic chemicals, precious metal compound, isotopes	160.7	169.1	329.8
06	Live trees, plants, bulbs, roots, cut flowers etc	105.6	78.3	183.8
40	Rubber and articles thereof	56.2	110.6	166.9
32	Tanning, dyeing extracts, tannins, derivs,pigments etc	36.2	128.2	164.4
68	Stone, plaster, cement, asbestos, mica, etc articles	61.6	80.4	142.0
30	Pharmaceutical products	44.0	85.6	129.6
38	Miscellaneous chemical products	39.5	88.6	128.1
83	Miscellaneous articles of base metal	40.4	77.1	117.5
65	Headgear and parts thereof	26.1	76.6	102.7
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	40.2	55.2	95.4
other product groups		344.6	425.8	770.3
Total Trade Effect		14,217.0	17,981.1	32,198.1

The following chart shows the impact of the tariff reduction on selected[2] product groups.

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[2] The groups shown are the ones whose exports to Colombia (post tariff reduction) are highest.

Israel's Exports to Colombia Before & After Bilateral Tariff Elimination
selected product groups

Data Sours: The World Bank (WITS Simulation)

The Colombian export increase is much more moderate - a 2.3% growth, equivalent to US$ 1.18 millions. This relatively low outcome can be attributed to the fact that Colombia's main exports to Israel are concentrated on oil and coffee, which already have a 0% tariff upon entry. 66% of the increase on exports is related to "trade creation".

Table 3 shows the value of Colombia's export to Israel, before and after the bilateral tariff reduction in the 20 main product groups of said exports. Table 4 shows the estimated increase in the country's exports to Israel, divided into trade diversion and creation.

Product Code (2 Digits)	Product Description	Exports Before FTA ('000$)	Exports After FTA ('000$)	Estimated Exports Increase Due to FTA ('000$)
	Table 3: Estimated Change in Colombia's Export to Israel			
17	Sugars and sugar confectionery	1,720.0	1,797.6	77.6
39	Plastics and articles thereof	868.0	967.7	99.7
44	Wood and articles of wood, wood charcoal	791.0	872.4	81.4
29	Organic chemicals	656.0	756.4	100.4
61	Articles of apparel, accessories, knit or crochet	193.0	621.7	428.7
48	Paper & paperboard, articles of pulp, paper and board	477.0	606.7	129.7
21	Miscellaneous edible preparations	528.0	551.7	23.7
84	Nuclear reactors, boilers, machinery, etc	361.0	455.1	94.1
70	Glass and glassware	210.0	264.2	54.2
85	Electrical, electronic equipment	249.0	259.8	10.8
71	Pearls, precious stones, metals, coins, etc	198.0	198.3	0.3
60	Knitted or crocheted fabric	98.0	115.6	17.6
90	Optical, photo, technical, medical, etc apparatus	86.0	91.5	5.5
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	73.0	83.0	10.0
94	Furniture, lighting, signs, prefabricated buildings	30.0	51.2	21.2
62	Articles of apparel, accessories, not knit or crochet	39.0	49.3	10.3
69	Ceramic products	18.0	22.1	4.1
38	Miscellaneous chemical products	19.0	21.6	2.6
30	Pharmaceutical products	16.0	18.2	2.2
68	Stone, plaster, cement, asbestos, mica, etc articles	8.0	9.5	1.5
Other Product Groups		22.0	27.3	5.3
Total Exports		51,842.0	53,022.7	1,180.7

Table 4: Estimated Change in Colombia's Export to Israel				
Product Code (2 Digits)	Product Description	Exports Before FTA ('000$)	Exports After FTA ('000$)	Estimated Exports Increase Due to FTA ('000$)
17	Sugars and sugar confectionery	1,720.0	1,797.6	77.6
39	Plastics and articles thereof	868.0	967.7	99.7
44	Wood and articles of wood, wood charcoal	791.0	872.4	81.4
29	Organic chemicals	656.0	756.4	100.4
61	Articles of apparel, accessories, knit or crochet	193.0	621.7	428.7
48	Paper & paperboard, articles of pulp, paper and board	477.0	606.7	129.7
21	Miscellaneous edible preparations	528.0	551.7	23.7
84	Nuclear reactors, boilers, machinery, etc	361.0	455.1	94.1
70	Glass and glassware	210.0	264.2	54.2
85	Electrical, electronic equipment	249.0	259.8	10.8
71	Pearls, precious stones, metals, coins, etc	198.0	198.3	0.3
60	Knitted or crocheted fabric	98.0	115.6	17.6
90	Optical, photo, technical, medical, etc apparatus	86.0	91.5	5.5
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	73.0	83.0	10.0
94	Furniture, lighting, signs, prefabricated buildings	30.0	51.2	21.2
62	Articles of apparel, accessories, not knit or crochet	39.0	49.3	10.3
69	Ceramic products	18.0	22.1	4.1
38	Miscellaneous chemical products	19.0	21.6	2.6
30	Pharmaceutical products	16.0	18.2	2.2
68	Stone, plaster, cement, asbestos, mica, etc articles	8.0	9.5	1.5
Other Product Groups		22.0	27.3	5.3
Total Exports		51,842.0	53,022.7	1,180.7

The following chart shows the impact of the tariff reduction on selected[3] product groups.
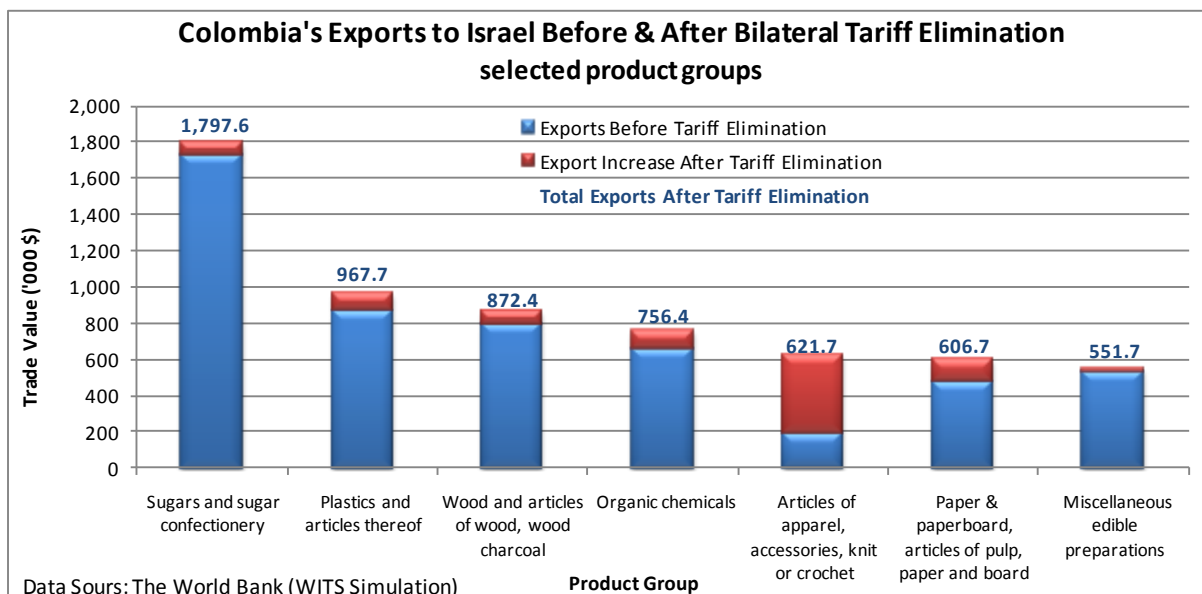
As the SMART model is based on current trade, the most impacted sectors are the ones on which there already is trade. Therefore, there is a need for additional analysis.

3.2.2 Trade Potential Model

According to existing import and export flows between Israel and Colombia it appears that the trade composition does not reflect the export potential. Therefore, we must identify the products with the highest potential as a result of the FTA.

Methodology

1. The potential trade was estimated in accordance with the following methodology: We used data on Israel's exports to all its trading partners (including exports to Colombia) as well as Colombia's imports from all its trading partners (including imports from Israel) over the period of 2008-2010, by tariff subheadings (Harmonized System 6 digits).
2. In order to include all the possible product groups, we used tariff subheadings from the list of Israel's exports to all its trading partners, as well as the list of Colombia's imports from all its trading partners. The overall number is set at 4,945[4] tariff subheadings.
3. Two checks were made on each product to validate whether or not it can be included in the potential trade group of products. The two checks were:
4. Does Colombia import the product from (at least one of) its trading partners but **not from Israel**.
5. Does Israel export the product to (at least one of) its trading partners but **not to Colombia**.
6. The products with positive results in both checks were then compiled into a list of potential trade products.

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[3]The groups shown are the ones whose exports to Israel (post tariff reduction) are highest.
[4]This figure is true for the count made in 2009.

7. Once the potential goods that could be exported were identified, the potential trade value was quantified. Colombia's imports of all products in the potential list, from all its trading partners (excluding imports from Israel which, as explained, do not exist in these products) were summed.
8. The share of Israel's export to Colombia of all of Colombia's import for the year 2009 was calculated and found to be 0.6%. This share was assumed to remain the same for the products in the potential group and the potential was then estimated to amount to 0.6% of all Colombian imports in the potential group of products.

Since this only covers the demand side of Israel's tradable goods, another check was required to make sure that Israel has the ability to supply this demand.

To make sure the potential we estimated does not exceed Israel's maximum supply capacity for each product, we tested whether this share is greater than Israel's total export in each product group in 2009. For the products where this share exceeded total export, a different calculation was made. We assumed that the county's maximum exporting capacity can increase (in the short term) by 20%. The potential was then set as 20% of Israel's export in 2009 for these products.

This exercise identifies product groups with "export potential" between Israel and Colombia in an eventual Free Trade Agreement. It does not reflect an **actual increase** in exports from each country, because this result depends on the FTA taking effect.

Results

This exercise shows a trade potential in 2,756 products (in Harmonized System 6 digits) over the period of 2009. Colombia's total import in 2009 was composed of 13,690 products. Israel's total export that year (2009) was composed of 3,398 products[5]. The model shows a potential increase in Israeli export to Colombia of US$ 72.5 Million, an increase of 34.4% over 2009 exports.

The following table displays the main 10 potential sectors according to tariff subheadings (Harmonized System 2 digits) in 2009:

Table 5: Major Sectors In The Potential Group		
Product Code (2 Digit)	**Product Description**	**Trade Potential Value ('000$)**
10	Cereals	7,118.9
29	Organic chemicals	4,131.2
39	Plastics and articles thereof	2,920.9
23	Residues and waste from the food industries; prepared animal feed	2,886.5
73	Articles of iron or steel	1,904.8
40	Rubber and articles thereof	1,807.9
30	Pharmaceutical products	1,661.9
74	Copper and articles thereof	1,171.9
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	1,007.8
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	936.7

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[5]Israel's export to colombia in 2009 was composed of 334 products.

According to the model, the sector which will be most affected is the **Cereal** sector with potential trade value of over US\$ 7 Million. Other sectors likely to be significantly affected are the **Organic Chemicals** and **Plastics sectors**. When looking at a more specified grouping for the products (tariff subheadings HS 6 digits), great potential trade is found in **Maize excluding seed** with a trading potential of over US\$ 4 Million.

The following table displays the main 20 items with potential trade:

Table 6: Main Products in Israel's Potential Group		
Product Code (6 Digit)	**Product Description**	**Trade Potential Value ('000$)**
100590	Maize excl. seed	4,265.2
851712	Electric apparatus for line telephony or telegraphy telephone sets, teleprinters, modems, facsimile machines	2,232.4
230400	Soybean oilcake & other solid residue, whether or not ground	2,220.8
100190	Wheat (other than durum wheat), and meslin	2,195.4
870410	Dumpers designed for off-highway use	1,575.2
290122	Propene (propylene)	1,466.3
290321	Vinyl chloride (chloroethylene)	1,283.1
740811	Wire of refined copper, max. cross-sectional dimension>6mm	1,048.5
843049	Other boring or sinking machinery, not self-propelled	959.6
390110	Polyethylene having a specific gravity<0.94, in primary forms	736.4
841480	Other air pumps, air or gas compressors, ventilating or recycling hoods incorporating a fan	700.7
401110	New pneumatic tyres of rubber, used on motor cars	685.8
870324	Other vehicles, with spark-ignition internal combustion reciprocating piston engine, cylinder capacity>3000cc	683.1
870422	Trucks, with diesel or semi-diesel engine	651.0
890190	Other vessels for the transport of goods & other vessels for the transport of both persons & goods	608.5
300220	Vaccines for Human Medicine	554.9
520100	Cotton (Not Carded or Combed)	529.3
870600	Chassis fitted with engines, for the motor vehicles of headings 87.01 to 87.06	521.2
090111	Coffee, not roasted or decaffeinated	494.6
870899	Other parts and accessories of motor vehicles	490.3

3.2.3   Empirical analysis of FTA's effect on Israel's exports

At the request of Israel's Foreign Trade Administration, a study was conducted by Pareto Group, attempting to estimate the effect of various macroeconomic indicators on Israel's export performance. The study was based on extending the traditional export demand function by introducing FTA, among other explanatory variables. The effect of FTA and the elasticity of export with respect to economic activity, and other explanatory variables, are estimated for each destination country[6]. This use of disaggregated data on Israel's international trade with its main trading partners; along with utilizing a panel econometrical technique is unique and enables a new and closer look on the effectiveness of its foreign trade policy.

About The Model

The basic estimation equation is the following:

$$EXPORT_{i,t} = \beta_0 + \beta_1 IMPORT_{i,t} + \beta_2 EX\_Rate_t + \beta_3 FTA_{i,t} + \beta_4 CORR_{i,t} + \beta_5 Sq\_CORR_{i,t} + \varepsilon_{i,t}$$

Where $EXPORT_{i,t}$ is the natural log of Israel's real exports to country i (excluding exports of diamonds) in year t; $IMPORT_{i,t}$ is the natural log of total real imports of country i in year t; $EX\_Raete_{i,t}$ is the natural log of the real exchange rate in year t between Israel and country i; $FTA_{i,t}$ is a dummy variable that takes the value one if Israel has a trade agreement with country i in year t and of zero otherwise; $CORR_{i,t}$ is the natural log of the CPI corruption index of country i in year t and $Sq\_CORR_{i,t}$ is the squared term of this Variable; $\varepsilon_{i,t}$ is the i.i.d. error with a mean of zero and a constant standard deviation.

Results

The result of the study indicates that on average, the existence of an FTA between Israel and each of its trading partners has increased bilateral trade by 88%.

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[6] The study includes Israel's top export partners, accounting for 76% of the industrial exports (excluding diamonds).

4. TRADE IN SERVICES AND INVESTMENTS

Services have a significant impact on growth and efficiency across a wide range of industries and overall economic performance. For instance, sectors such as transport, telecommunications and financial services are key determinants of the conditions in which persons, merchandise, services and capital flow. Another illustration of the services" major role is environmental services, which contribute to sustainable development by alleviating negative impacts of economic activities.

Services currently represent more than two thirds of World Gross Domestic Product (GDP).

Colombia and Israel have seen grow their participation on this global trend.

Exports   **Imports**
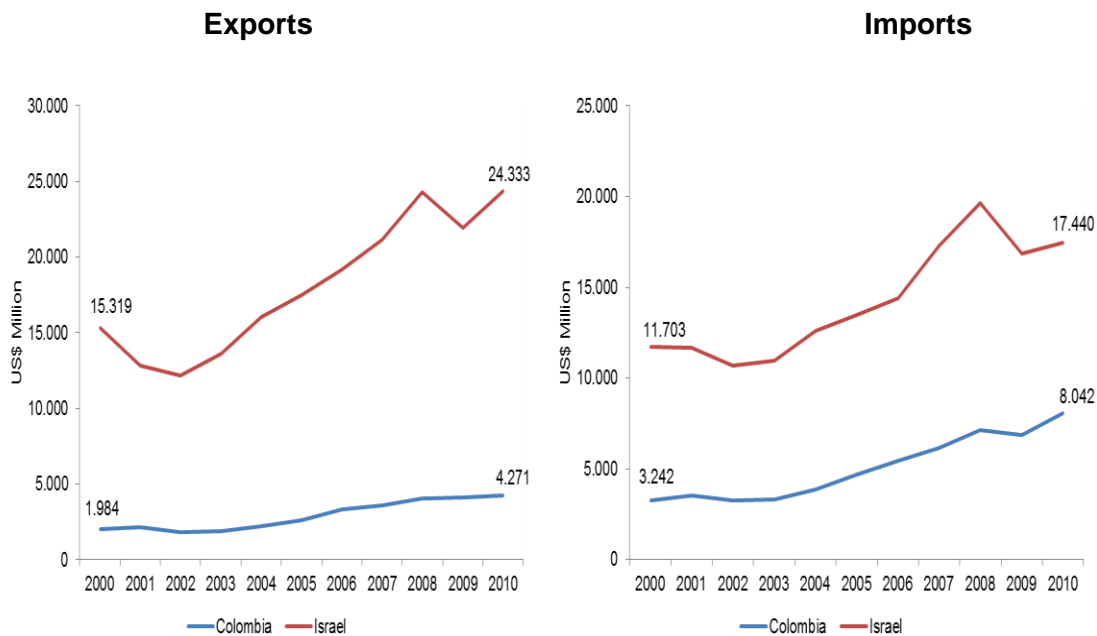
In Colombia, services have grown in importance in our economy. The main services include transport, tourism, communication, construction and insurance.

In the case of Israel, the main sectors include finance and business services; commerce, restaurants and hotels; housing services; health, transport; and communication.

In order to expand trade, in addition to the traditional trade in goods, and due to the complementarities of the two economies, the parties may explore trade liberalization in services.

Investments

Investment have the potential to contribute to a country's development by providing a source of capital to create or upgrade services and infrastructure; new export opportunities by developing other areas of the economy and opportunities for technology transfer.

Colombia and Israel have seen their numbers of FDI grow during the last decade, which have contributed to both economic development and prosperity.
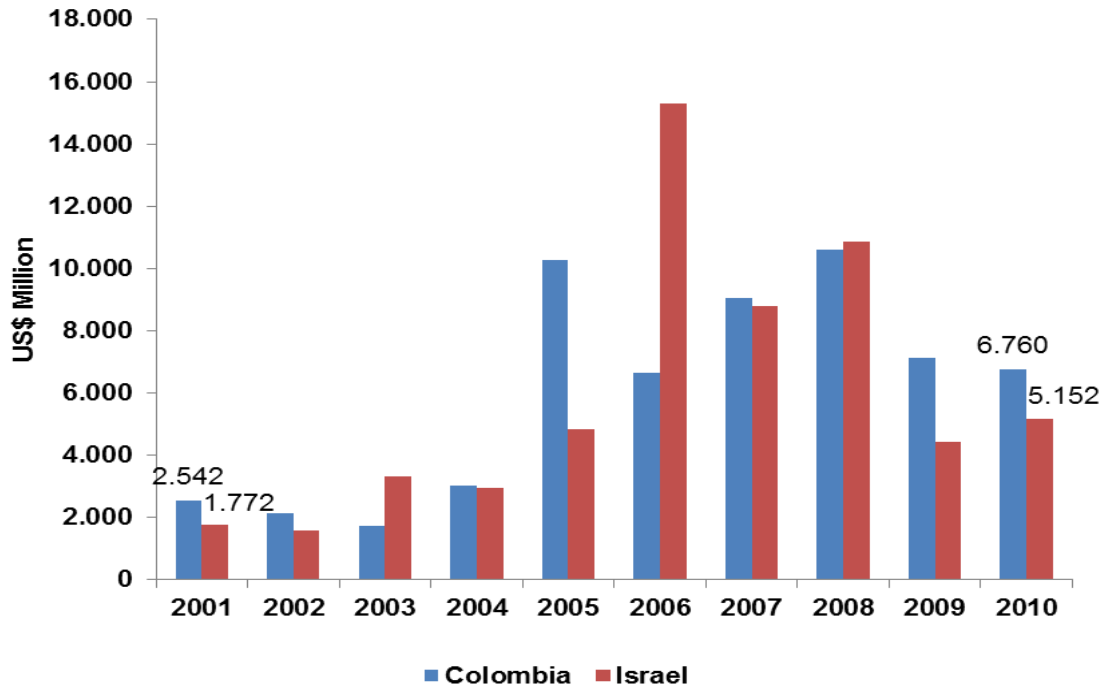
By setting up the basic rules for protection and promotion of investments within the framework of the FTA's negotiations, we would create legal certainty among investors from both countries, and an important area for economic cooperation between the governments.

5. JOINT CONCLUSIONS AND RECOMMENDATIONS

1. In the framework of the bilateral relations between our two countries and following consultations, it was mutually agreed that the parties will conduct a joint feasibility study in order to evaluate the effects of an FTA.

2. Information with regards to bilateral trade and investments, macroeconomic data and trade effects of an FTA has been exchanged and satisfying conclusions have been reached.

3. The Joint Study's main conclusions indicate that an FTA between Colombia and Israel would have a positive impact on their economic and trade relations;

   a. An FTA would, as a result of tariff elimination, increase bilateral trade. Special consideration should be given to its effects on bilateral trade of agricultural products due to their sensitivity for both economies.

   b. The tariff elimination should create trade in products that neither country are already trading with each other; but are part of their global trade. Increase in trade is also to be expected from a substantive reduction in the transactions' costs and the improvement of trade procedures.

   c. An FTA, whose disciplines provide for a legal certainty, should improve the investment environment, and should have a positive impact on exports of services.

   d. An FTA would also facilitate the enhancement of the bilateral flows of investments and the creation of new businesses.

   e. Finally, an FTA between Colombia and Israel would foster cooperation activities in areas such as technology, innovation, industrial development and environment.

4. Both sides agree to advise their respective Governments on the positive results obtained by the "Joint Study on the feasibility of a Free Trade Agreement between Colombia and Israel", and to recommend their Governments to launch bilateral FTA negotiations between Colombia and Israel.

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Mr. Gabriel Duque Mildenberg   Mr. Boaz Hirsch

Vice Minister for Foreign Trade   Deputy Director General for Foreign Trade

Ministry of Trade, Industry and Tourism   Ministry of Industry, Trade and Labor

Republic of Colombia   State of Israel