Complete Tables for

Computation Analysis of the Accession of Chile to the NAFTA And Western Hemisphere Integration

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TABLE 1
Average Tariff Rates for the Mid-1990s among
Major Western Hemisphere Trading Countries

Importer	Exporter						
	Argentina	Brazil	Canada	Chile	Colombia	Mexico	U.S.
Argentina		0	9.9	10.3	6	8.6	11.4
Brazil	0		10.4	7.2	10.7	9.1	16.9
Canada	8.7	5.6		3.6	5.5	2.8	4.5
Chile	11.3	13.1	11.1		11	14.4	12.5
Colombia	13.1	10.1	7.7	12.8		10.1	10.5
Mexico	5.5	9.1	7.5	2.9	7.7		11.4
U.S.	2.1	2	1.1	2.5	1.5	1.2	

TABLE 2

Summary Results of the Expansion of NAFTA
Change in Country Imports, Exports, Terms of Trade, Welfare
and Return to Labor and Capital
(Trade in Millions of U.S. Dollars)

	Imports	Exports	Terms of Trade Percent Change	Equivalent Variation		Wage Percent Change	Return to Capital Percent Change
				Percent	Millions		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. EXPANSION OF NAFTA TO INCLUDE CHILE							
Argentina	-661.20	258.90	-0.06	-0.02	-19.83	-0.01	-0.01
Brazil	-1426.54	-532.39	-0.02	-0.01	-30.86	0.00	0.00
Canada	3483.76	1457.42	0.01	0.01	53.57	0.01	0.00
Chile	27358.50	34612.40	-0.80	0.37	101.48	0.36	0.57
Colombia	-79.69	-33.02	-0.01	0.00	-1.69	0.00	0.00
Mexico	1711.69	1525.14	0.01	0.10	232.99	0.01	0.01
United States	37469.60	28566.90	0.02	0.09	4591.88	0.00	0.00
Other	-1522.89	370.99	0.00	-0.04	-4871.28	0.00	0.00
B. EXPANSION OF NAFTA TO INCLUDE ARGENTINA, BRAZIL, CHILE AND COLOMBIA							
Argentina	22723.80	36562.30	-0.90	-0.17	-175.36	-0.05	0.02
Brazil	127055.00	190591.00	-1.89	0.11	510.85	0.02	0.03
Canada	21855.30	14016.30	0.05	0.11	625.95	0.03	0.02
Chile	28918.40	36090.10	-0.76	0.39	107.74	0.35	0.57
Colombia	39026.90	53970.60	-2.11	0.50	205.34	-0.57	-0.16
Mexico	12711.10	13880.20	0.00	0.26	607.85	0.03	0.04
United States	296569.00	219012.00	0.18	0.09	4592.67	0.03	0.03
Other	44782.00	31049.80	0.02	0.02	2700.59	0.01	0.01
C. EXPANSION OF NAFTA TO INCLUDE CHILE: TARIFFS AND NONTARIFF BARRIERS							
Argentina	-769.51	212.58	-0.07	-0.02	-20.59	-0.01	-0.01
Brazil	-1525.96	-606.54	-0.02	-0.01	-29.21	0.00	0.00
Canada	3411.59	1399.92	0.01	0.01	55.59	0.00	0.00
Chile	27891.00	34381.10	-0.72	0.32	90.17	0.25	0.45
Colombia	-139.47	-66.39	-0.01	-0.01	-2.34	0.00	0.00
Mexico	1724.24	1524.29	0.01	0.10	227.95	0.00	0.01
United States	38423.40	29649.70	0.02	0.01	684.33	0.00	0.00
Other	-2370.11	-268.58	0.00	0.00	-70.03	0.00	0.00
D. EXPANSION OF NAFTA TO INCLUDE CHILE: TARIFFS AND CAPITAL FLOWS							
Argentina	-76.17	568.80	-0.02	-0.01	-6.36	-0.01	0.00
Brazil	403.13	974.52	-0.01	0.00	-17.04	0.00	0.00
Canada	3607.29	1479.85	0.01	0.01	58.82	0.01	0.00
Chile	46310.00	72169.40	-1.92	5.15	1430.72	4.76	1.37
Colombia	222.25	203.22	0.01	0.00	1.94	0.00	0.00
Mexico	1837.88	1590.09	0.01	0.10	239.44	0.01	0.01
United States	41442.80	31044.00	0.02	0.09	4659.51	0.00	0.00
Other	20473.40	7281.55	0.01	-0.05	-6007.61	-0.01	0.00

TABLE 3

SUMMARY RESULTS OF THE EXPANSION OF NAFTA
CHANGE IN COUNTRY IMPORTS, EXPORTS, TERMS OF TRADE, WELFARE
AND RETURN TO LABOR AND CAPITAL
SENSITIVITY ANALYSIS
(Trade in Millions of U.S. Dollars)

	Imports	Exports	Terms of Trade Percent Change	Equivalent Variation		Wage Percent Change	Return to Capital Percent Change
				Percent	Millions		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. EXPANSION OF NAFTA TO INCLUDE ARG., BRZ., CHL. AND COL.: TYBOUT AND WESTBROOK SCALE ESTIMATES							
Argentina	22680.20	36656.40	-0.92	-0.14	-149.27	-0.07	0.00
Brazil	126769.00	190182.00	-1.89	0.14	670.31	-0.02	-0.01
Canada	20027.20	12204.70	0.05	0.12	663.87	0.02	0.02
Chile	27779.00	34512.00	-0.71	0.52	143.74	0.22	0.44
Colombia	37281.40	51577.00	-2.02	0.37	152.78	-0.33	0.05
Mexico	12483.70	13749.10	-0.01	0.26	623.61	0.02	0.03
United States	292229.00	214622.00	0.19	0.09	4823.13	0.03	0.02
Other	43198.30	28902.20	0.02	0.02	2740.40	0.00	0.01
B. EXPANSION OF NAFTA TO INCLUDE CHILE: TARIFFS AND CAPITAL FLOWS -TYBOUT AND WESTBROOK SCALE ESTIMATES							
Argentina	-300.14	489.23	-0.04	-0.01	-10.55	-0.01	0.00
Brazil	293.40	868.15	-0.01	0.00	-15.59	0.00	0.00
Canada	3386.70	1241.47	0.01	0.01	55.05	0.00	0.00
Chile	43275.90	67524.40	-1.74	4.82	1340.79	4.41	1.05
Colombia	79.43	111.88	0.00	0.00	0.33	0.00	0.00
Mexico	1845.60	1584.70	0.01	0.10	235.31	0.00	0.01
United States	41057.30	30599.90	0.03	0.09	4633.84	0.00	0.00
Other	18974.40	6737.70	0.01	-0.05	-5862.83	-0.01	0.00
C. EXPANSION OF NAFTA TO INCLUDE CHILE: TARIFFS - 1980 DATA BASE							
Argentina	-326.61	-249.20	-0.01	-0.01	-10.66	0.00	0.00
Brazil	390.54	308.40	0.00	-0.01	-20.52	0.00	0.01
Canada	1714.19	1027.40	0.01	0.01	24.83	0.01	0.00
Chile	24332.30	30812.70	-1.22	1.39	389.63	0.05	0.77
Colombia	7.01	0.67	0.00	0.00	1.29	0.00	0.00
Mexico	563.80	555.51	0.00	0.01	24.70	0.00	0.00
United States	31388.10	21722.40	0.04	0.01	257.04	0.01	0.00
Other	-2425.44	-672.27	0.00	0.00	-76.66	0.00	0.00

TABLE 4

SECTORAL EFFECTS ON THE UNITED STATES
EXPANSION OF NAFTA TO INCLUDE CHILE
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CND	CHL	COL	MEX		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	-0.01	0.56	0.26	0.15	-0.06	12.03	0.06	-0.06	-0.04	0.00
Food	-0.01	0.13	0.30	0.18	-0.02	8.07	0.09	-0.02	0.00	-0.01
Textiles	0.06	0.03	0.05	0.03	0.00	1.52	0.01	0.00	0.01	0.00
Clothing	-0.01	0.03	0.03	0.02	0.00	1.87	0.01	0.00	0.00	-0.01
Leather Products	-0.02	0.12	0.37	0.20	-0.05	15.53	0.10	-0.03	-0.02	-0.02
Footwear	-0.04	0.06	0.18	0.10	-0.03	6.11	0.04	-0.03	-0.04	-0.04
Wood Products	-0.03	0.03	0.32	0.20	-0.04	5.28	0.11	-0.03	0.00	0.00
Furniture	0.07	0.08	0.30	0.20	-0.03	6.09	0.10	-0.03	0.00	0.00
Paper Products	0.03	0.00	0.31	0.20	-0.03	8.32	0.11	0.01	0.00	0.00
Printing, Publishing	0.02	0.07	0.31	0.21	0.00	1.75	0.12	0.02	0.00	0.00
Chemicals	0.11	0.07	0.27	0.19	-0.02	4.26	0.05	0.02	0.01	0.00
Petroleum Products	0.03	0.08	0.35	0.20	-0.01	2.42	0.10	0.00	0.00	0.00
Rubber Products	0.21	0.05	0.25	0.16	-0.02	1.55	0.09	0.01	0.02	0.01
Nonmetal Min. Products	0.13	0.07	0.28	0.19	-0.02	4.30	0.10	-0.02	0.00	0.00
Glass Products	0.07	0.06	0.29	0.20	-0.03	17.26	0.10	0.00	0.00	0.00
Iron, Steel	0.08	0.02	0.05	0.03	0.00	1.05	0.02	0.00	0.01	0.01
Nonferrous Metals	-0.07	0.35	0.17	0.14	-0.06	8.76	-0.02	-0.04	-0.05	-0.05
Metal Products	0.14	0.07	0.26	0.16	-0.01	6.57	0.09	0.00	0.01	0.00
Nonelec. Machinery	0.16	0.06	0.22	0.15	0.08	0.16	0.10	-0.04	0.02	0.01
Electrical Machinery	0.02	0.06	0.26	0.16	0.01	5.74	0.09	-0.01	0.00	-0.01
Transport Equipment	0.16	0.04	0.21	0.11	-0.02	5.20	0.09	0.07	0.03	0.02
Misc. Mfrs.	0.02	0.08	0.26	0.19	-0.04	7.76	0.09	0.01	0.00	-0.01
Mining, Quarrying	0.01	0.05	0.31	0.21	-0.02	3.10	0.10	-0.07	-0.01	-0.01
Utilities	0.00	-0.02	0.31	0.20	-0.03	1.16	0.11	-0.01	0.00	0.00
Construction	-0.06	0.09	0.30	0.20	-0.01	1.32	0.11	0.00	0.00	0.00
Wholesale Trade	-0.07	0.07	0.31	0.21	-0.01	0.11	0.12	-0.01	0.00	0.00
Transportation	-0.08	0.08	0.32	0.20	-0.02	1.32	0.11	0.00	0.00	0.00
Financial Services	-0.05	0.05	0.32	0.21	-0.01	-0.34	0.11	-0.02	0.00	0.00
Personal Services	-0.07	0.07	0.32	0.21	-0.02	0.71	0.11	-0.01	0.00	0.00
Total	0.07	0.07	0.27	0.14	-0.02	8.78	0.08	-0.02	0.00	0.00

TABLE 5
Sectoral Effects on Chile
Expansion of NAFTA to Include Chile
Tariffs Only
Percent Change

SECTOR	EXPORTS (2)	IMPORTS (3)	BILATERAL IMPORTS ARG (4)	BRZ (5)	CND (6)	COL (7)	MEX (8)	US (9)	Output (10)	No. Firms (11)	Output per firm (12)
Agriculture	6.21	5.83	-1.49	-1.61	27.31	-1.71	27.30	27.33	1.35	0.00	
Food	2.38	2.20	-1.76	-1.89	26.43	-1.98	26.43	26.46	0.11	-0.18	0.30
Textiles	1.85	1.44	-0.78	-0.82	10.10	-0.86	10.10	10.11	-0.89	-1.30	0.41
Clothing	2.14	0.01	-0.21	-0.23	3.60	-0.24	3.61	3.61	-0.37	-0.62	0.25
Leather Products	2.82	3.86	-1.63	-1.80	27.67	-1.91	27.69	27.71	-0.13	-0.58	0.44
Footwear	5.59	0.50	-0.47	-0.50	5.69	-0.53	5.69	5.69	0.54	0.14	0.40
Wood Products	1.48	9.79	-2.79	-2.90	26.59	-3.00	26.59	26.63	0.71	0.53	0.18
Furniture	5.44	5.38	-3.83	-3.93	25.57	-4.03	25.57	25.60	0.08	-0.42	0.50
Paper Products	1.05	4.73	-2.27	-2.38	27.11	-2.47	27.15	27.14	-0.38	-0.72	0.34
Printing, Publishing	1.26	7.19	-1.85	-1.95	27.57	-2.04	27.60	27.57	-0.85	-1.13	0.28
Chemicals	1.84	5.94	-4.59	-4.68	24.54	-4.81	24.58	24.56	-2.84	-3.44	0.60
Petroleum Products	1.69	5.29	-1.96	-2.10	26.23	-2.20	26.25	26.25	-0.22	-0.79	0.57
Rubber Products	0.48	2.91	-3.34	-3.44	24.32	-3.51	24.35	24.34	-1.72	-2.37	0.65
Nonmetal Min. Products	2.95	5.04	-2.02	-2.13	27.38	-2.22	27.38	27.40	-0.55	-1.05	0.50
Glass Products	2.10	2.23	-2.08	-2.16	26.45	-2.26	26.48	26.48	-1.71	-1.95	0.25
Iron, Steel	1.06	0.46	-3.11	-3.20	26.32	-3.28	26.35	26.34	-1.90	-2.30	0.40
Nonferrous Metals	4.80	2.71	-3.16	-3.19	26.31	-3.37	26.34	26.34	4.25	3.39	0.86
Metal Products	3.42	4.50	-2.09	-2.21	27.32	-2.29	27.33	27.33	-1.01	-1.38	0.37
Nonelec. Machinery	0.71	4.19	-7.08	-7.15	22.50	-7.21	22.37	22.41	-9.30	-9.87	0.57
Electrical Machinery	0.66	2.65	-5.94	-6.06	23.51	-6.13	23.48	23.49	-6.14	-6.84	0.70
Transport Equipment	3.07	5.88	-11.16	-11.28	37.09	-11.31	37.20	37.13	-7.64	-9.67	2.03
Misc. Mfrs.	3.75	2.68	-10.48	-10.56	18.94	-10.65	18.99	18.97	2.07	0.99	1.08
Mining, Quarrying	2.65	0.56	-1.22	-1.32	26.99	-1.42	26.94	27.00	1.52	0.93	0.59
Utilities	0.93	-1.06	-0.90	-1.01	-1.24	-1.11	-1.22	-1.21	-0.05	0.01	-0.05
Construction	1.14	-1.90	-1.69	-1.80	-2.01	-1.88	-2.00	-1.99	-0.67	0.00	-0.67
Wholesale Trade	0.01	-0.71	-0.48	-0.58	-0.80	-0.67	-0.80	-0.78	-0.68	0.00	-0.68
Transportation	1.21	-1.67	-1.42	-1.54	-1.76	-1.63	-1.74	-1.74	-0.42	0.00	-0.42
Financial Services	-0.41	-0.54	-0.30	-0.42	-0.64	-0.52	-0.64	-0.63	-0.97	0.00	-0.97
Personal Services	0.58	-1.57	-1.33	-1.45	-1.67	-1.55	-1.66	-1.65	-0.94	0.00	-0.94
Total	3.83	3.60	-3.28	-6.26	23.91	-2.22	28.20	25.22	0.07	0.25	

TABLE 6

SECTORAL EFFECTS ON ARGENTINA

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			BRZ	CND	CHL	COL	MEX	US		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	1.51	-0.83	2.80	4.01	-0.95	4.09	4.21	3.99	0.70	0.00
Food	2.76	0.15	2.20	17.65	-1.73	3.50	17.83	10.11	0.63	0.59
Textiles	2.17	7.96	2.11	34.95	-1.99	2.68	30.56	35.03	-0.06	-0.11
Clothing	3.78	6.61	1.59	40.07	-2.54	3.11	43.87	43.65	0.25	0.06
Leather Products	11.44	0.00	1.42	14.21	-2.89	3.29	15.54	15.10	3.17	2.48
Footwear	6.67	15.53	1.23	43.96	-3.29	0.78	43.87	43.50	1.39	0.56
Wood Products	2.93	-1.10	2.01	23.06	-1.60	2.46	29.51	29.11	0.13	0.12
Furniture	6.35	11.92	1.35	32.47	-1.66	0.53	32.76	32.43	-0.01	-0.22
Paper Products	1.76	4.60	2.30	34.79	-2.42	-5.16	35.06	34.72	-0.11	-0.17
Printing, Publishing	4.33	11.76	1.83	32.38	-2.35	-3.90	19.64	32.28	-0.37	-0.41
Chemicals	1.75	4.45	0.59	16.66	-3.79	-0.39	16.95	16.55	-0.95	-1.14
Petroleum Products	7.44	-4.47	-0.22	-6.05	-3.11	5.07	27.45	-6.07	2.82	2.66
Rubber Products	0.78	6.23	1.81	31.06	-2.13	1.23	33.86	30.99	-0.53	-0.63
Nonmetal Min. Products	3.35	-0.31	1.95	23.19	-1.50	4.33	23.40	16.83	-0.18	-0.21
Glass Products	0.98	4.61	1.89	29.16	-2.86	2.91	29.49	29.12	-0.15	-0.19
Iron, Steel	1.32	2.68	2.15	34.50	-2.72	-4.58	34.85	34.53	-0.03	-0.09
Nonferrous Metals	3.53	0.96	0.72	11.70	0.55	4.03	12.12	11.66	0.75	0.63
Metal Products	2.87	2.67	2.24	22.37	-1.87	-3.54	34.76	22.34	-0.20	-0.23
Nonelec. Machinery	-0.16	5.54	1.58	33.20	-6.25	-9.50	33.23	32.92	-1.39	-1.50
Electrical Machinery	3.46	8.89	-0.79	30.65	-5.73	-7.65	31.01	30.66	-2.65	-2.91
Transport Equipment	0.79	5.57	1.83	7.17	-1.34	-4.70	34.42	24.05	-0.59	-0.66
Misc. Mfrs.	2.46	7.97	-0.55	32.84	-0.77	-1.74	23.06	32.77	-2.97	-3.18
Mining, Quarrying	2.51	1.63	4.00	10.72	0.24	5.84	3.03	-3.65	0.74	0.74
Utilities	0.59	-3.28	2.18	-3.82	-1.78	2.22	-3.65	-3.89	-0.10	0.08
Construction	1.36	-2.42	2.14	-4.02	-1.75	1.99	-3.78	-4.05	-0.32	0.00
Wholesale Trade	2.37	-3.25	1.97	-3.84	-2.84	-3.23	-3.70	-3.91	-0.41	0.00
Transportation	2.47	-3.22	2.00	-3.87	-1.64	1.08	-3.65	-3.91	-0.12	0.00
Financial Services	1.55	-2.60	1.93	-3.72	-3.16	1.61	-3.58	-3.78	-0.24	0.00
Personal Services	2.19	-2.98	1.71	-3.98	-2.34	2.31	-3.77	-4.01	-0.26	0.00
Total	2.83	4.76	1.68	21.71	-1.27	1.97	18.70	24.38	-0.07	-0.18

TABLE 7
SECTORAL EFFECTS ON BRAZIL
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	CND	CHL	COL	MEX	US		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	6.27	-0.27	-2.11	23.61	-3.56	1.48	20.25	14.31	0.37	0.00
Food	5.84	-3.12	-2.19	30.18	-3.99	1.24	47.61	35.90	0.38	0.35
Textiles	4.85	8.52	-2.39	55.05	-4.19	0.48	48.64	55.11	0.04	-0.03
Clothing	6.12	2.40	-1.92	60.03	-4.33	1.32	-6.18	60.87	-0.06	-0.13
Leather Products	8.50	0.00	0.74	19.93	-3.50	2.67	21.27	26.46	1.35	1.25
Footwear	8.08	3.15	-0.62	45.98	-4.22	-0.15	-7.06	45.52	1.26	0.92
Wood Products	6.07	-4.30	-2.45	44.82	-3.79	0.26	26.03	15.88	0.17	0.16
Furniture	8.97	15.04	-2.01	43.63	-3.27	-1.09	-6.08	44.46	-0.14	-0.19
Paper Products	6.17	-2.63	-2.68	-3.94	-4.67	-7.41	23.35	8.45	0.55	0.42
Printing, Publishing	3.95	-0.21	-2.58	14.71	-4.42	-5.97	-3.73	6.19	-0.22	-0.28
Chemicals	4.54	12.87	-2.76	52.87	-4.99	-1.59	-6.08	47.29	-0.47	-0.52
Petroleum Products	5.37	4.91	-0.50	30.43	-3.11	5.07	21.95	26.93	-0.17	-0.11
Rubber Products	3.84	2.13	-2.47	-6.23	-3.99	-0.63	8.29	16.98	0.09	0.03
Nonmetal Min. Products	6.05	7.77	-2.41	35.85	-3.63	2.09	36.06	35.83	-0.10	-0.11
Glass Products	8.33	1.66	-2.41	13.87	-4.99	0.78	14.96	17.05	-0.15	-0.18
Iron, Steel	3.52	-0.90	-2.78	18.52	-4.90	-6.76	34.18	29.83	0.74	0.61
Nonferrous Metals	5.91	0.43	-1.86	1.13	-0.26	3.22	15.69	9.76	0.07	0.00
Metal Products	6.30	9.75	-2.76	47.44	-4.35	-6.02	25.69	35.81	-0.07	-0.19
Nonelec. Machinery	7.28	9.29	-4.35	36.56	-9.08	-12.33	36.62	41.05	-0.24	-0.47
Electrical Machinery	7.72	18.88	-4.52	51.39	-6.94	-8.86	46.83	51.63	-1.47	-1.63
Transport Equipment	5.59	5.61	-3.01	12.09	-3.96	-7.88	43.31	16.62	0.13	-0.06
Misc. Mfrs.	3.94	12.97	-4.08	33.98	-1.30	-2.27	33.08	40.18	-0.80	-0.86
Mining, Quarrying	5.62	-4.98	-1.57	-4.41	-1.96	3.64	-4.23	-5.13	2.60	2.54
Utilities	0.60	-5.48	-2.30	-6.02	-3.98	0.03	-5.84	-6.08	-0.02	0.03
Construction	4.08	-5.45	-2.70	-6.40	-4.12	-0.39	-6.16	-6.43	-0.24	0.00
Wholesale Trade	5.21	-5.67	-2.69	-6.12	-5.12	-5.51	-5.97	-6.18	-0.31	0.00
Transportation	5.34	-5.51	-2.32	-6.07	-3.85	-1.13	-5.86	-6.12	-0.21	0.00
Financial Services	4.19	-5.43	-2.51	-5.99	-5.43	-0.66	-5.85	-6.05	-0.34	0.00
Personal Services	4.56	-5.38	-2.32	-6.04	-4.40	0.25	-5.83	-6.07	-0.36	0.00
Total	5.70	5.32	-2.46	19.94	-2.57	0.74	16.37	35.23	-0.08	-0.01

TABLE 8
SECTORAL EFFECTS ON CHILE
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CND	COL	MEX	US		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	6.32	6.04	1.02	3.27	26.42	4.54	26.61	26.40	1.37	0.00
Food	2.58	3.04	1.00	3.05	25.51	4.29	25.68	25.47	0.13	-0.17
Textiles	0.45	1.52	0.24	1.09	9.77	1.31	9.92	9.80	-1.04	-1.44
Clothing	2.23	-0.06	0.21	0.43	3.49	0.63	3.52	3.49	-0.38	-0.61
Leather Products	2.93	5.12	3.90	3.95	25.54	5.83	26.88	26.44	-0.26	-0.71
Footwear	5.68	0.66	0.64	0.84	5.55	0.74	5.53	5.46	0.54	0.14
Wood Products	2.07	9.08	-0.29	1.97	25.48	2.42	25.87	25.47	1.17	0.99
Furniture	6.35	5.09	-0.77	0.99	24.60	0.16	24.89	24.56	0.41	-0.10
Paper Products	0.36	5.88	0.42	3.16	26.25	-4.31	26.52	26.18	-0.79	-1.12
Printing, Publishing	-1.75	7.12	0.84	3.18	26.87	-2.55	27.04	26.77	-1.05	-1.31
Chemicals	0.84	6.20	-2.00	0.13	23.86	-0.84	24.14	23.75	-3.18	-3.77
Petroleum Products	-5.46	6.25	2.20	2.47	25.42	7.55	25.57	25.39	-0.46	-1.01
Rubber Products	0.32	3.13	-0.95	1.32	23.46	0.78	23.68	23.40	-1.91	-2.55
Nonmetal Min. Products	3.40	5.60	0.52	2.72	26.42	5.11	26.63	26.40	-0.59	-1.10
Glass Products	2.12	2.94	0.36	2.48	25.43	3.46	25.75	25.38	-2.02	-2.26
Iron, Steel	1.14	1.52	-0.59	2.16	25.11	-4.57	25.46	25.13	-2.28	-2.69
Nonferrous Metals	5.39	3.42	0.07	1.84	25.27	5.15	25.69	25.23	4.78	3.88
Metal Products	3.59	4.82	0.34	2.86	26.27	-2.92	26.55	26.24	-1.04	-1.46
Nonelec. Machinery	0.77	4.02	-4.73	-1.62	21.91	-12.70	21.95	21.64	-8.95	-9.56
Electrical Machinery	-0.75	2.55	-3.84	-1.32	22.80	-8.18	23.16	22.81	-5.96	-6.68
Transport Equipment	1.78	5.98	-8.72	-5.87	36.17	-13.75	36.49	36.09	-8.05	-10.10
Misc. Mfrs.	4.29	2.53	-8.58	-5.58	18.42	-6.76	19.28	18.34	2.61	1.55
Mining, Quarrying	2.02	1.29	1.54	4.78	26.06	6.54	26.27	25.97	1.34	0.75
Utilities	-0.37	-0.23	1.61	3.89	-2.11	3.94	-1.93	-2.17	-0.07	0.00
Construction	0.63	-1.48	0.75	3.21	-2.95	3.06	-2.71	-2.98	-0.67	0.00
Wholesale Trade	-0.07	-1.15	1.74	4.12	-1.69	-1.08	-1.55	-1.76	-0.69	0.00
Transportation	0.92	-2.01	1.09	3.20	-2.66	2.28	-2.45	-2.71	-0.44	0.00
Financial Services	-0.61	-0.56	1.93	4.11	-1.54	3.79	-1.40	-1.61	-0.99	0.00
Personal Services	0.08	-1.47	1.13	3.09	-2.59	3.69	-2.39	-2.63	-0.96	0.00
Total	4.00	3.80	-0.65	-1.21	23.19	4.20	27.65	24.41	0.07	0.13

TABLE 9
SECTORAL EFFECTS ON COLOMBIA
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS (2)	IMPORTS (3)	BILATERAL IMPORTS ARG (4)	BRZ (5)	CND (6)	CHL (7)	MEX (8)	US (9)	Output (10)	No. Firms (11)
Agriculture	9.79	7.72	-3.96	-1.67	6.51	-5.41	22.32	19.48	1.41	0.00
Food	7.95	0.78	-4.03	-1.90	23.62	-5.83	16.72	16.49	0.81	0.79
Textiles	4.32	22.46	-4.60	-2.30	30.54	-6.40	41.83	41.49	-1.26	-1.28
Clothing	2.43	29.25	-10.91	-9.18	34.62	-13.32	28.73	33.32	0.13	0.07
Leather Products	13.33	2.09	-2.45	-2.39	22.80	-6.70	24.13	23.69	2.85	2.81
Footwear	5.61	13.07	-1.47	-0.55	42.19	-5.07	42.10	41.73	0.63	0.89
Wood Products	10.13	5.99	-3.98	-1.71	31.20	-5.32	31.59	31.18	-0.73	-0.57
Furniture	8.30	25.00	-4.18	-2.43	34.65	-5.44	34.62	34.28	-1.57	-0.96
Paper Products	4.05	20.73	-0.52	2.22	30.68	-2.51	30.95	30.61	-4.92	-2.82
Printing, Publishing	2.71	15.31	0.16	2.51	36.61	-1.68	36.78	36.51	-2.20	-0.49
Chemicals	2.26	5.56	-4.70	-2.54	17.04	-6.92	17.33	16.93	-3.09	-2.70
Petroleum Products	9.98	-3.77	-5.85	-5.57	15.88	-8.45	27.89	15.85	3.85	2.91
Rubber Products	1.48	11.07	-3.28	-0.87	32.83	-4.81	33.07	32.77	-1.29	-0.91
Nonmetal Min. Products	7.91	5.95	-5.15	-2.95	26.31	-6.40	26.52	26.29	0.87	0.60
Glass Products	3.89	5.11	-3.62	-1.44	28.08	-6.20	28.41	19.72	-0.18	-0.06
Iron, Steel	0.21	2.93	0.86	3.61	31.48	-1.26	30.51	30.19	-2.81	-1.18
Nonferrous Metals	10.73	-3.61	-1.98	-0.22	7.78	-0.39	8.19	7.74	3.54	3.34
Metal Products	1.41	2.55	0.95	3.47	30.04	-0.64	14.17	13.86	-2.12	-0.10
Nonelec. Machinery	-0.53	6.05	-6.03	-2.93	16.53	-10.76	19.84	19.53	-12.60	-10.43
Electrical Machinery	2.10	4.27	-1.94	0.58	16.50	-4.36	16.86	16.51	-5.89	-3.60
Transport Equipment	9.96	10.55	-1.30	1.55	11.59	-2.28	25.71	25.32	-6.23	-3.97
Misc. Mfrs.	5.58	9.62	-6.22	-3.22	8.02	-3.44	36.58	18.24	-2.76	-2.25
Mining, Quarrying	8.50	9.77	-5.16	-1.78	4.94	-5.54	5.16	29.69	5.10	5.18
Utilities	3.32	-6.91	-3.23	-0.95	-6.95	-4.91	-6.78	-7.02	-0.91	0.00
Construction	4.45	-5.46	-3.15	-0.70	-6.85	-4.58	-6.61	-6.89	-0.85	0.00
Wholesale Trade	0.09	-5.06	-2.14	0.24	-5.57	-4.57	-5.42	-5.63	-4.96	0.00
Transportation	4.47	-6.33	-2.97	-0.85	-6.71	-4.49	-6.50	-6.76	-1.77	0.00
Financial Services	4.07	-5.85	-3.26	-1.09	-6.74	-6.18	-6.60	-6.80	-1.41	0.00
Personal Services	5.14	-6.36	-3.62	-1.65	-7.34	-5.70	-7.13	-7.37	-1.05	0.00
Total	7.63	6.76	-4.50	-0.06	14.72	-5.18	20.02	20.60	-0.95	-0.42

TABLE 10

SECTORAL EFFECTS ON MEXICO
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CND	CHL	COL	US		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	0.08	0.27	6.92	9.21	-0.24	5.47	10.51	-0.26	-0.04	0.00
Food	0.20	0.94	8.64	10.77	-0.26	6.84	12.07	-0.30	-0.06	-0.09
Textiles	1.14	0.11	34.92	37.22	-0.39	33.12	37.79	-0.32	0.15	0.09
Clothing	-0.02	0.28	52.85	54.58	-0.32	50.45	56.10	-0.32	-0.09	-0.14
Leather Products	-0.14	0.82	30.85	30.91	-1.50	26.61	32.78	-0.60	-0.16	-0.19
Footwear	-0.17	1.02	54.92	55.84	0.00	51.32	55.40	-0.45	-0.10	-0.13
Wood Products	0.40	-0.01	42.88	45.14	-0.21	41.54	45.59	-0.22	0.30	0.28
Furniture	0.32	-0.09	41.61	43.36	-0.17	40.35	42.53	-0.21	0.19	0.16
Paper Products	0.55	-0.16	10.93	13.37	-0.16	9.17	6.73	-0.22	0.11	0.07
Printing, Publishing	3.13	1.49	20.92	23.24	-0.42	19.09	17.56	-0.52	-0.04	-0.08
Chemicals	1.73	0.26	29.58	31.69	-0.22	27.40	30.73	-0.33	0.23	0.15
Petroleum Products	0.18	3.90	39.72	40.00	-0.43	37.12	45.29	-0.46	-0.24	-0.29
Rubber Products	0.36	0.43	27.83	30.20	-0.23	26.34	29.63	-0.29	0.01	-0.05
Nonmetal Min. Products	0.26	0.99	41.54	43.72	-0.24	40.31	46.09	-0.26	-0.02	-0.04
Glass Products	0.51	0.71	52.90	55.08	-0.30	50.33	56.10	-0.34	0.09	0.04
Iron, Steel	0.42	0.43	11.53	13.68	-0.26	9.88	8.43	-0.24	0.04	-0.02
Nonferrous Metals	0.69	-0.11	16.36	18.12	-0.26	17.95	21.43	-0.30	0.26	0.21
Metal Products	0.38	0.14	26.34	28.84	-0.26	24.77	23.12	-0.29	0.05	0.00
Nonelec. Machinery	0.38	0.42	35.02	38.12	-0.58	30.29	27.04	-0.85	0.12	0.05
Electrical Machinery	1.29	0.09	39.43	41.96	-0.34	37.02	35.10	-0.32	0.30	0.24
Transport Equipment	0.79	0.21	33.08	35.93	-0.27	32.10	28.05	-0.35	0.16	0.09
Misc. Mfrs.	2.79	-0.05	34.15	37.15	-0.46	36.93	35.96	-0.54	1.25	1.19
Mining, Quarrying	-0.05	0.24	14.26	17.64	-0.32	13.88	19.47	-0.41	-0.06	-0.07
Utilities	0.07	-0.22	3.56	5.84	-0.16	1.88	5.89	-0.23	0.02	0.01
Construction	-0.46	0.67	3.46	5.92	-0.24	2.04	5.77	-0.27	0.00	0.00
Wholesale Trade	-0.06	0.06	3.27	5.65	-0.16	0.84	0.45	-0.22	-0.01	0.00
Transportation	-0.03	-0.02	3.53	5.65	-0.21	2.01	4.73	-0.26	0.00	0.00
Financial Services	-0.35	0.33	3.31	5.49	-0.16	0.40	5.17	-0.23	-0.02	0.00
Personal Services	-0.17	0.22	3.49	5.46	-0.23	1.41	6.06	-0.26	-0.02	0.00
Total	0.48	0.32	18.73	30.18	-0.31	10.19	23.46	-0.41	0.03	0.01

TABLE 11
SECTORAL EFFECTS ON CANADA
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CHL	COL	MEX	US		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	0.12	0.23	8.87	11.12	7.45	12.39	0.13	-0.08	-0.02	0.00
Food	-0.03	0.82	17.76	19.70	16.12	20.88	0.12	-0.09	-0.05	-0.08
Textiles	0.04	0.77	26.46	28.57	24.80	29.10	0.15	-0.16	-0.22	-0.27
Clothing	-0.03	0.78	53.89	55.62	51.49	57.14	0.06	-0.16	-0.15	-0.21
Leather Products	-1.51	4.84	48.42	48.47	44.17	50.35	-1.48	-1.93	-2.57	-2.64
Footwear	0.04	0.62	8.58	8.71	8.08	8.65	-0.03	-0.09	-0.13	-0.29
Wood Products	-0.17	0.16	26.67	28.92	25.35	29.36	0.38	-0.02	-0.09	-0.11
Furniture	0.03	0.18	39.45	41.16	38.21	40.35	0.26	-0.07	-0.01	-0.04
Paper Products	0.01	0.34	30.60	33.31	28.63	25.92	0.25	-0.08	0.00	-0.03
Printing, Publishing	0.12	0.09	15.07	17.41	13.23	11.68	0.28	0.01	0.11	0.09
Chemicals	0.66	0.07	26.89	29.04	24.66	28.06	0.32	-0.08	0.22	0.17
Petroleum Products	0.04	0.12	5.56	5.84	2.96	11.13	0.17	-0.01	0.02	0.01
Rubber Products	0.05	0.12	3.78	6.19	2.26	5.62	0.26	-0.05	0.03	-0.02
Nonmetal Min. Products	0.09	0.38	8.99	11.17	7.76	13.53	0.16	-0.06	-0.03	-0.05
Glass Products	-0.02	0.09	15.96	18.13	13.38	19.15	0.30	-0.07	-0.03	-0.05
Iron, Steel	0.04	0.33	3.94	6.66	1.84	0.00	0.30	-0.02	-0.03	-0.05
Nonferrous Metals	-0.14	0.13	4.50	6.27	6.09	9.57	0.39	-0.07	-0.10	-0.14
Metal Products	0.21	0.25	31.00	33.50	29.43	27.78	0.27	-0.04	0.02	-0.01
Nonelec. Machinery	1.01	0.02	7.37	10.48	2.64	-0.61	0.18	-0.14	0.59	0.54
Electrical Machinery	0.11	0.07	16.51	18.96	14.17	12.31	0.27	-0.06	0.04	-0.01
Transport Equipment	0.08	0.08	6.29	9.11	5.32	1.31	0.35	-0.05	0.06	0.01
Misc. Mfrs.	0.01	0.06	25.69	28.69	28.47	27.51	0.83	-0.11	0.01	-0.04
Mining, Quarrying	-0.24	0.41	4.14	7.52	3.76	9.35	0.17	-0.13	-0.11	-0.12
Utilities	0.08	-0.02	3.74	6.02	2.06	6.07	0.20	-0.05	0.03	0.01
Construction	-0.67	0.43	3.71	6.17	2.29	6.02	0.26	-0.02	0.01	0.00
Wholesale Trade	-0.22	0.12	3.45	5.83	1.02	0.63	0.17	-0.04	0.02	0.00
Transportation	-0.18	0.11	3.76	5.88	2.24	4.96	0.23	-0.03	0.01	0.00
Financial Services	-0.33	0.13	3.49	5.66	0.57	5.34	0.15	-0.05	0.01	0.00
Personal Services	-0.33	0.21	3.72	5.69	1.64	6.29	0.21	-0.03	0.00	0.00
Total	0.10	0.18	26.46	16.32	10.20	21.32	0.22	-0.08	0.02	0.01

TABLE 12
SECTORAL EFFECTS ON THE UNITED STATES
EXPANSION OF NAFTA TO INCLUDE
ARGENTINA, BRAZIL, CHILE AND COLOMBIA
TARIFFS ONLY
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CND	CHL	COL	MEX		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	-0.06	2.18	14.12	16.26	-0.15	12.77	17.46	0.03	-0.17	0.00
Food	-0.19	1.77	10.51	12.41	0.01	8.91	13.57	0.17	-0.04	-0.07
Textiles	0.97	0.24	1.94	2.30	-0.01	1.65	2.40	0.06	0.06	0.02
Clothing	0.66	0.22	2.20	2.37	0.00	1.96	2.52	0.02	0.02	-0.02
Leather Products	-0.38	4.73	20.31	20.36	-1.52	16.06	22.24	-0.18	-0.59	-0.64
Footwear	0.42	0.91	8.15	8.61	-0.09	6.35	8.39	-0.14	-0.56	-0.64
Wood Products	-0.33	0.39	7.81	10.08	0.01	6.47	10.52	0.39	-0.04	-0.06
Furniture	0.15	0.53	8.45	10.19	0.03	7.21	9.37	0.32	0.00	-0.03
Paper Products	0.07	0.44	10.94	13.60	0.06	9.02	6.36	0.33	0.00	-0.03
Printing, Publishing	0.08	0.48	4.42	6.76	0.12	2.57	1.02	0.29	0.02	0.00
Chemicals	1.54	0.55	7.07	9.16	0.12	4.91	8.21	0.40	0.15	0.11
Petroleum Products	0.01	1.21	5.86	6.13	0.01	3.25	11.43	0.17	-0.01	-0.05
Rubber Products	0.62	0.48	3.54	5.62	0.05	2.23	5.12	0.25	0.03	-0.01
Nonmetal Min. Products	0.74	0.72	6.32	8.38	0.01	5.17	10.59	0.20	0.00	-0.03
Glass Products	0.17	0.61	20.63	22.81	0.03	18.05	23.83	0.36	-0.01	-0.03
Iron, Steel	0.44	0.23	1.58	2.07	0.00	1.19	0.86	0.06	0.05	0.02
Nonferrous Metals	-0.23	0.87	8.49	10.12	-0.02	9.96	13.16	0.36	-0.07	-0.11
Metal Products	0.59	0.53	8.86	11.03	0.04	7.49	6.06	0.28	0.03	0.00
Nonelec. Machinery	0.99	0.54	5.49	8.32	0.24	1.19	-1.77	0.28	0.11	0.07
Electrical Machinery	0.85	0.37	8.72	10.97	-0.03	6.57	4.86	0.29	0.18	0.13
Transport Equipment	0.32	0.37	6.68	9.10	0.07	5.85	2.41	0.33	0.03	-0.01
Misc. Mfrs.	0.32	0.46	6.15	9.06	0.04	8.84	7.91	0.88	0.03	-0.01
Mining, Quarrying	-0.58	0.69	4.27	7.55	-0.08	3.89	9.32	0.13	-0.20	-0.22
Utilities	-0.18	0.15	3.80	6.08	0.08	2.12	6.13	0.26	0.02	0.00
Construction	-0.47	0.70	3.75	6.21	0.05	2.33	6.06	0.30	0.02	0.00
Wholesale Trade	-0.58	0.53	3.51	5.89	0.08	1.08	0.69	0.23	0.02	0.00
Transportation	-0.66	0.61	3.81	5.93	0.07	2.29	5.01	0.28	0.02	0.00
Financial Services	-0.39	0.41	3.55	5.73	0.08	0.63	5.41	0.21	0.01	0.00
Personal Services	-0.53	0.56	3.77	5.73	0.05	1.68	6.33	0.25	0.01	0.00
Total	0.52	0.58	8.63	9.18	0.04	9.68	10.60	0.23	0.02	0.00

TABLE 13
SECTORAL EFFECTS ON THE UNITED STATES
EXPANSION OF NAFTA TO INCLUDE CHILE
TARIFF AND NONTARIFF BARRIERS
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms
			ARG	BRZ	CND	CHL	COL	MEX		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture	-0.01	0.61	0.27	0.14	-0.06	13.24	0.06	-0.06	-0.04	0.00
Food	0.00	0.14	0.30	0.18	-0.03	9.21	0.10	-0.02	0.00	-0.01
Textiles	0.22	0.04	0.05	0.03	0.00	9.16	0.01	0.00	0.01	0.01
Clothing	0.07	0.05	0.03	0.02	0.00	19.83	0.01	0.00	-0.01	-0.01
Leather Products	-0.02	0.12	0.38	0.20	-0.07	15.83	0.11	-0.03	-0.02	-0.02
Footwear	0.03	0.06	0.17	0.09	-0.07	13.00	0.04	-0.03	-0.04	-0.05
Wood Products	-0.03	0.03	0.33	0.20	-0.03	5.46	0.12	-0.02	0.00	0.00
Furniture	0.06	0.07	0.31	0.20	-0.03	5.90	0.11	-0.03	0.00	0.00
Paper Products	0.03	0.00	0.32	0.20	-0.03	8.44	0.12	-0.01	0.00	0.00
Printing, Publishing	0.02	0.07	0.33	0.21	0.00	1.68	0.13	0.02	0.00	0.00
Chemicals	0.11	0.07	0.29	0.19	-0.02	3.94	0.07	0.01	0.01	0.01
Petroleum Products	0.04	0.07	0.35	0.20	-0.01	2.42	0.10	0.00	0.00	0.00
Rubber Products	0.22	0.05	0.26	0.16	-0.02	1.27	0.10	0.00	0.02	0.01
Nonmetal Min. Products	0.13	0.07	0.30	0.19	-0.01	4.35	0.11	-0.02	0.00	0.00
Glass Products	0.07	0.06	0.31	0.20	-0.03	17.32	0.11	-0.01	0.00	0.00
Iron, Steel	0.08	0.02	0.06	0.04	0.00	5.86	0.02	0.00	0.01	0.01
Nonferrous Metals	-0.06	0.35	0.20	0.14	-0.07	8.87	-0.02	-0.04	-0.05	-0.05
Metal Products	0.14	0.07	0.28	0.17	-0.01	7.62	0.11	-0.01	0.01	0.00
Nonelec. Machinery	0.16	0.06	0.23	0.16	0.08	-0.36	0.12	-0.04	0.02	0.01
Electrical Machinery	0.02	0.06	0.28	0.16	0.01	6.22	0.11	-0.01	0.00	-0.01
Transport Equipment	0.16	0.03	0.23	0.12	-0.03	3.72	0.10	0.04	0.02	0.02
Misc. Mfrs.	0.02	0.08	0.29	0.19	-0.04	6.74	0.11	0.00	0.00	-0.01
Mining, Quarrying	0.01	0.05	0.32	0.20	-0.02	3.24	0.10	-0.06	-0.01	-0.01
Utilities	-0.01	-0.01	0.32	0.20	-0.02	1.20	0.11	-0.01	0.00	0.00
Construction	-0.06	0.08	0.31	0.19	-0.01	1.09	0.12	0.00	0.00	0.00
Wholesale Trade	-0.07	0.06	0.32	0.20	-0.01	0.29	0.13	-0.01	0.00	0.00
Transportation	-0.08	0.08	0.32	0.20	-0.01	1.29	0.12	0.00	0.00	0.00
Financial Services	-0.05	0.05	0.33	0.20	-0.01	-0.31	0.12	-0.01	0.00	0.00
Personal Services	-0.07	0.07	0.32	0.20	-0.01	1.05	0.11	0.00	0.00	0.00
Total	0.07	0.08	0.28	0.14	-0.02	9.79	0.09	-0.03	0.00	0.00

TABLE 14
SECTORAL EFFECTS ON CHILE
EXPANSION OF NAFTA TO INCLUDE CHILE
TARIFFS AND NONTARIFF BARRIERS
Percent Change

SECTOR	EXPORTS	IMPORTS	BILATERAL IMPORTS						Output	No. Firms	Output per firm
			ARG	BRZ	CND	COL	MEX	US			
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Agriculture	6.90	5.64	-1.84	-1.98	27.54	-2.06	27.53	27.56	1.51	0.00	
Food	2.66	2.06	-2.10	-2.25	27.26	-2.33	27.26	27.29	0.10	-0.09	0.19
Textiles	3.83	4.58	-2.77	-2.89	26.62	-2.99	26.64	26.65	-1.70	-1.96	0.26
Clothing	17.02	3.09	-3.24	-3.38	26.13	-3.47	26.14	26.16	1.24	1.00	0.24
Leather Products	3.08	4.24	-1.24	-1.42	28.04	-1.52	28.07	28.08	0.54	0.19	0.35
Footwear	15.49	3.40	-3.31	-3.46	25.93	-3.56	26.02	26.03	2.03	1.70	0.33
Wood Products	1.62	9.43	-3.13	-3.26	26.23	-3.35	26.24	26.27	0.77	0.69	0.08
Furniture	5.27	5.33	-3.87	-3.98	25.52	-4.07	25.52	25.55	-0.18	-0.56	0.38
Paper Products	0.95	4.65	-2.34	-2.47	27.03	-2.54	27.05	27.06	-0.55	-0.68	0.13
Printing, Publishing	1.20	7.05	-1.97	-2.10	27.43	-2.17	27.44	27.43	-1.06	-1.00	-0.05
Chemicals	1.50	6.00	-4.65	-4.75	24.76	-4.88	24.79	24.78	-3.29	-3.62	0.33
Petroleum Products	1.70	5.36	-2.24	-2.39	27.13	-2.48	27.14	27.14	-0.40	-0.74	0.34
Rubber Products	0.37	3.22	-3.55	-3.67	25.85	-3.74	25.88	25.88	-2.17	-2.48	0.31
Nonmetal Min. Products	2.96	5.03	-2.02	-2.14	27.38	-2.22	27.37	27.39	-0.82	-1.03	0.21
Glass Products	2.11	2.03	-2.43	-2.54	26.96	-2.63	26.98	26.99	-1.95	-1.85	-0.10
Iron, Steel	1.50	0.10	-3.45	-3.57	25.97	-3.63	25.97	25.98	-2.15	-2.45	0.30
Nonferrous Metals	4.29	2.92	-2.92	-2.98	26.52	-3.15	26.55	26.55	3.76	3.19	0.56
Metal Products	3.81	4.28	-2.30	-2.43	27.10	-2.50	27.10	27.11	-1.23	-1.45	0.23
Nonelec. Machinery	0.56	4.07	-7.18	-7.26	22.39	-7.30	22.26	22.30	-9.92	-10.22	0.30
Electrical Machinery	0.61	2.49	-6.07	-6.21	23.35	-6.27	23.32	23.33	-6.51	-6.99	0.48
Transport Equipment	1.34	6.12	-10.90	-11.04	37.33	-11.05	37.41	37.37	-9.73	-11.03	1.30
Misc. Mfrs.	3.01	2.62	-10.51	-10.62	18.88	-10.70	18.92	18.91	1.23	0.65	0.58
Mining, Quarrying	2.69	0.32	-1.57	-1.69	27.82	-1.79	27.77	27.82	1.31	0.83	0.48
Utilities	0.96	-1.29	-1.13	-1.25	-1.47	-1.34	-1.46	-1.45	-0.25	0.01	-0.26
Construction	0.93	-1.92	-1.71	-1.82	-2.03	-1.90	-2.02	-2.01	-0.92	0.00	-0.92
Wholesale Trade	0.20	-1.04	-0.80	-0.91	-1.12	-0.99	-1.13	-1.11	-0.82	0.00	-0.82
Transportation	1.19	-1.80	-1.55	-1.68	-1.89	-1.76	-1.88	-1.88	-0.58	0.00	-0.58
Financial Services	-0.39	-0.74	-0.50	-0.62	-0.84	-0.71	-0.84	-0.82	-1.14	0.00	-1.14
Personal Services	0.89	-1.97	-1.73	-1.85	-2.07	-1.94	-2.06	-2.06	-1.01	0.00	-1.01
Total	3.81	3.67	-3.57	-6.41	24.17	-2.61	28.64	25.89	-0.12	0.20	

TABLE 15
SECTORAL EFFECTS ON CHILE
EXPANSION OF NAFTA TO INCLUDE CHILE
TARIFF REMOVAL AND CAPITAL FLOWS
Percent Change

SECTOR	EXPORTS (2)	IMPORTS (3)	BILATERAL IMPORTS ARG (4)	BRZ (5)	CND (6)	COL (7)	MEX (8)	US (9)	Output (10)	No. Firms (11)	Output per firm (12)
Agriculture	5.17	10.74	3.34	3.28	32.19	3.18	32.18	32.21	3.84	0.00	
Food	4.93	3.57	-0.43	-0.50	27.81	-0.60	27.81	27.83	4.38	2.36	2.02
Textiles	3.81	2.46	0.08	0.06	10.97	0.01	10.97	10.98	4.80	2.38	2.41
Clothing	2.84	0.59	-0.01	-0.02	3.82	-0.03	3.82	3.82	4.66	1.96	2.70
Leather Products	7.02	3.98	-1.54	-1.64	27.82	-1.75	27.83	27.85	4.87	1.80	3.06
Footwear	7.34	0.89	-0.17	-0.19	5.99	-0.21	5.99	6.00	5.17	1.96	3.21
Wood Products	3.79	11.74	-0.88	-0.93	28.54	-1.03	28.55	28.58	3.65	1.97	1.68
Furniture	7.64	8.15	-1.09	-1.15	28.34	-1.25	28.33	28.36	4.41	1.98	2.43
Paper Products	5.12	4.82	-2.23	-2.27	27.21	-2.42	27.25	27.24	4.62	2.33	2.28
Printing, Publishing	5.30	7.76	-1.32	-1.36	28.15	-1.47	28.17	28.15	4.50	0.93	3.57
Chemicals	5.63	7.88	-2.69	-2.73	26.48	-2.85	26.52	26.49	3.08	0.04	3.04
Petroleum Products	6.55	4.56	-2.73	-2.78	25.53	-2.96	25.54	25.54	4.98	2.51	2.47
Rubber Products	1.73	5.22	-1.07	-1.11	26.62	-1.19	26.65	26.65	3.84	1.00	2.84
Nonmetal Min. Products	6.34	5.09	-2.01	-2.06	27.44	-2.14	27.44	27.46	4.72	2.05	2.67
Glass Products	2.42	4.80	0.48	0.42	29.02	0.34	29.05	29.05	3.60	1.82	1.78
Iron, Steel	3.25	2.23	-1.36	-1.41	28.08	-1.53	28.11	28.11	4.96	1.91	3.05
Nonferrous Metals	11.47	1.12	-4.91	-4.72	24.76	-5.01	24.82	24.80	10.78	7.64	3.15
Metal Products	6.87	5.68	-0.93	-1.01	28.50	-1.12	28.51	28.52	4.91	1.92	3.00
Nonelec. Machinery	2.50	7.44	-3.83	-3.87	25.78	-3.97	25.62	25.67	0.49	-2.58	3.07
Electrical Machinery	3.10	6.34	-2.25	-2.35	27.20	-2.45	27.17	27.18	1.82	-2.56	4.37
Transport Equipment	7.71	9.00	-8.07	-8.14	40.21	-8.20	40.33	40.24	0.60	-3.65	4.25
Misc. Mfrs.	5.97	6.76	-6.41	-6.46	23.02	-6.55	23.08	23.05	5.19	1.76	3.43
Mining, Quarrying	6.90	1.59	-0.26	-0.33	27.99	-0.41	27.94	28.00	7.03	4.55	2.48
Utilities	6.00	-1.13	-1.00	-1.05	-1.30	-1.15	-1.28	-1.27	5.68	0.05	5.62
Construction	4.80	-0.41	-0.23	-0.29	-0.52	-0.37	-0.51	-0.50	4.76	0.00	4.76
Wholesale Trade	6.01	-1.10	-0.90	-0.95	-1.18	-1.06	-1.18	-1.17	5.07	0.00	5.07
Transportation	5.68	-0.81	-0.61	-0.66	-0.90	-0.75	-0.88	-0.88	4.95	0.00	4.95
Financial Services	4.17	0.20	0.41	0.35	0.12	0.25	0.12	0.13	4.61	0.00	4.61
Personal Services	-0.55	3.32	3.51	3.45	3.21	3.35	3.23	3.23	2.75	0.00	2.75
Total	8.00	6.09	-1.70	-3.74	26.61	-0.94	30.57	28.07	5.30	3.67	

TABLE 16

ELASTICITY OF RETURNS TO SCALE

MICHIGAN MODEL DATA BASE AND TYBOUT-WESTBROOK SCALE ESTIMATES

FOR

CANADA, CHILE AND MEXICO

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Canada	Chile	Mexico	Canada	Chile	Mexico
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	1.00	1.00	1.00	n.a.	n.a.	n.a.
Food	1.50	1.52	1.50	1.27	1.35	1.07
Textiles	1.51	1.51	1.51	1.10	1.10	1.09
Clothing	1.50	1.51	1.50	1.04	1.12	1.08
Leather Products	1.50	1.53	1.50	1.10	1.14	1.07
Footwear	1.50	1.52	1.51	1.10	1.14	1.07
Wood Products	1.51	1.57	1.51	1.26	1.06	1.09
Furniture	1.50	1.52	1.50	1.26	1.06	1.09
Paper Products	1.51	1.56	1.50	1.22	1.02	1.04
Printing, Publishing	1.50	1.51	1.52	1.22	1.02	1.04
Chemicals	1.51	1.52	1.51	1.02	1.11	1.05
Petroleum Products	1.08	1.15	1.52	1.10	1.08	1.09
Rubber Products	1.50	1.60	1.51	1.10	1.08	1.09
Nonmetal Min. Products	1.50	1.52	1.51	1.30	1.07	1.05
Glass Products	1.50	1.55	1.52	1.30	1.07	1.05
Iron, Steel	1.18	1.15	1.51	1.14	1.17	1.09
Nonferrous Metals	1.51	1.53	1.52	1.14	1.17	1.09
Metal Products	1.50	1.19	1.50	1.14	1.17	1.09
Nonelec. Machinery	1.52	1.52	1.51	1.07	1.08	1.18
Electrical Machinery	1.51	1.15	1.51	1.13	1.05	1.10
Transport Equipment	1.50	1.51	1.50	1.12	1.11	1.06
Misc. Mfrs.	1.51	1.70	1.51	1.04	1.06	1.11
Mining, Quarrying	1.51	1.50	1.52	n.a.	n.a.	n.a.
Utilities	3.30	1.38	1.59	n.a.	n.a.	n.a.
Construction	1.44	1.34	1.34	n.a.	n.a.	n.a.
Wholesale Trade	1.62	1.52	1.75	n.a.	n.a.	n.a.
Transportation	1.42	1.38	1.56	n.a.	n.a.	n.a.
Financial Services	1.64	1.45	1.82	n.a.	n.a.	n.a.
Personal Services	1.88	1.60	1.64	n.a.	n.a.	n.a.

Sources: Michigan Model Data Base and Tybout and Westbrook (1996).

TABLE 17

SCALE EFFECTS ON ARGENTINA

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firm	Output	No. Firms	Output per firm
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	0.70	0.00	0.70	0.70	0.00	0.70
Food	0.63	0.59	0.04	0.62	0.59	0.03
Textiles	-0.06	-0.11	0.05	-0.08	-0.11	0.03
Clothing	0.25	0.06	0.20	0.23	0.06	0.17
Leather Products	3.17	2.48	0.69	3.18	2.50	0.68
Footwear	1.39	0.56	0.83	1.41	0.57	0.83
Wood Products	0.13	0.12	0.01	0.10	0.11	0.00
Furniture	-0.01	-0.22	0.21	-0.05	-0.22	0.17
Paper Products	-0.11	-0.17	0.06	-0.13	-0.16	0.04
Printing, Publishing	-0.37	-0.41	0.04	-0.40	-0.41	0.01
Chemicals	-0.95	-1.14	0.18	-1.00	-1.14	0.14
Petroleum Products	2.82	2.66	0.16	2.85	2.70	0.15
Rubber Products	-0.53	-0.63	0.10	-0.55	-0.62	0.07
Nonmetal Min. Products	-0.18	-0.21	0.03	-0.22	-0.22	0.00
Glass Products	-0.15	-0.19	0.04	-0.18	-0.19	0.01
Iron, Steel	-0.03	-0.09	0.06	-0.07	-0.10	0.03
Nonferrous Metals	0.75	0.63	0.12	0.72	0.64	0.08
Metal Products	-0.20	-0.23	0.03	-0.23	-0.24	0.01
Nonelec. Machinery	-1.39	-1.50	0.11	-1.40	-1.49	0.09
Electrical Machinery	-2.65	-2.91	0.26	-2.77	-2.92	0.15
Transport Equipment	-0.59	-0.66	0.07	-0.60	-0.64	0.04
Misc. Mfrs.	-2.97	-3.18	0.21	-3.07	-3.20	0.13
Mining, Quarrying	0.74	0.74	0.00	0.73	0.73	-0.01
Utilities	-0.10	0.08	-0.18	-0.12	0.08	-0.21
Construction	-0.32	0.00	-0.32	-0.36	0.00	-0.36
Wholesale Trade	-0.41	0.00	-0.41	-0.42	0.00	-0.42
Transportation	-0.12	0.00	-0.12	-0.14	0.00	-0.14
Financial Services	-0.24	0.00	-0.24	-0.26	0.00	-0.26
Personal Services	-0.26	0.00	-0.26	-0.29	0.00	-0.29
Total	-0.07	-0.18		-0.09	-0.18	

TABLE 18

SCALE EFFECTS ON BRAZIL

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firr	Output	No. Firms	Output per firr
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	0.37	0.00	0.37	0.35	0.00	0.35
Food	0.38	0.35	0.03	0.37	0.35	0.02
Textiles	0.04	-0.03	0.07	0.01	-0.03	0.04
Clothing	-0.06	-0.13	0.07	-0.09	-0.13	0.04
Leather Products	1.35	1.25	0.10	1.32	1.25	0.07
Footwear	1.26	0.92	0.34	1.22	0.93	0.29
Wood Products	0.17	0.16	0.01	0.15	0.15	0.00
Furniture	-0.14	-0.19	0.05	-0.16	-0.19	0.03
Paper Products	0.55	0.42	0.13	0.49	0.43	0.06
Printing, Publishing	-0.22	-0.28	0.06	-0.27	-0.28	0.02
Chemicals	-0.47	-0.52	0.05	-0.50	-0.52	0.01
Petroleum Products	-0.17	-0.11	-0.06	-0.18	-0.13	-0.05
Rubber Products	0.09	0.03	0.06	0.05	0.02	0.03
Nonmetal Min. Products	-0.10	-0.11	0.00	-0.13	-0.12	-0.01
Glass Products	-0.15	-0.18	0.03	-0.18	-0.18	0.00
Iron, Steel	0.74	0.61	0.13	0.70	0.61	0.09
Nonferrous Metals	0.07	0.00	0.07	0.04	0.00	0.04
Metal Products	-0.07	-0.19	0.12	-0.11	-0.18	0.06
Nonelec. Machinery	-0.24	-0.47	0.24	-0.33	-0.48	0.15
Electrical Machinery	-1.47	-1.63	0.15	-1.54	-1.62	0.08
Transport Equipment	0.13	-0.06	0.18	0.08	-0.06	0.13
Misc. Mfrs.	-0.80	-0.86	0.06	-0.83	-0.85	0.03
Mining, Quarrying	2.60	2.54	0.06	2.60	2.56	0.04
Utilities	-0.02	0.03	-0.05	-0.05	0.03	-0.08
Construction	-0.24	0.00	-0.24	-0.27	0.00	-0.27
Wholesale Trade	-0.31	0.00	-0.31	-0.35	0.00	-0.35
Transportation	-0.21	0.00	-0.21	-0.24	0.00	-0.24
Financial Services	-0.34	0.00	-0.34	-0.40	0.00	-0.40
Personal Services	-0.36	0.00	-0.36	-0.37	0.00	-0.37
Total	-0.08	-0.01		-0.11	-0.01	

TABLE 19

SCALE EFFECTS ON CHILE

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firm	Output	No. Firms	Output per firm
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	1.37	0.00	1.37	1.45	0.00	1.45
Food	0.13	-0.17	0.30	0.10	-0.09	0.19
Textiles	-1.04	-1.44	0.40	-1.27	-1.46	0.19
Clothing	-0.38	-0.61	0.23	-0.54	-0.60	0.06
Leather Products	-0.26	-0.71	0.45	-0.47	-0.67	0.20
Footwear	0.54	0.14	0.40	0.36	0.16	0.20
Wood Products	1.17	0.99	0.18	1.34	1.25	0.09
Furniture	0.41	-0.10	0.51	0.18	-0.21	0.39
Paper Products	-0.79	-1.12	0.33	-0.91	-1.00	0.08
Printing, Publishing	-1.05	-1.31	0.26	-1.23	-1.13	-0.10
Chemicals	-3.18	-3.77	0.59	-3.49	-3.82	0.32
Petroleum Products	-0.46	-1.01	0.55	-0.59	-0.90	0.31
Rubber Products	-1.91	-2.55	0.64	-2.23	-2.52	0.29
Nonmetal Min. Products	-0.59	-1.10	0.51	-0.82	-1.04	0.22
Glass Products	-2.02	-2.26	0.24	-2.14	-2.04	-0.10
Iron, Steel	-2.28	-2.69	0.42	-2.49	-2.80	0.31
Nonferrous Metals	4.78	3.88	0.91	4.28	3.68	0.60
Metal Products	-1.04	-1.46	0.42	-1.22	-1.50	0.28
Nonelec. Machinery	-8.95	-9.56	0.61	-9.44	-9.75	0.32
Electrical Machinery	-5.96	-6.68	0.72	-6.17	-6.65	0.48
Transport Equipment	-8.05	-10.10	2.05	-10.09	-11.39	1.30
Misc. Mfrs.	2.61	1.55	1.06	1.83	1.26	0.56
Mining, Quarrying	1.34	0.75	0.60	1.20	0.72	0.48
Utilities	-0.07	0.00	-0.07	-0.23	0.00	-0.23
Construction	-0.67	0.00	-0.67	-0.89	0.00	-0.89
Wholesale Trade	-0.69	0.00	-0.69	-0.81	0.00	-0.81
Transportation	-0.44	0.00	-0.44	-0.57	0.00	-0.57
Financial Services	-0.99	0.00	-0.99	-1.13	0.00	-1.13
Personal Services	-0.96	0.00	-0.96	-0.98	0.00	-0.98
Total	0.07	0.13		-0.10	0.11	

TABLE 20

SCALE EFFECTS ON COLOMBIA

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firm	Output	No. Firms	Output per firm
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	1.41	0.00	1.41	1.31	0.00	1.31
Food	0.81	0.79	0.02	0.80	0.72	0.08
Textiles	-1.26	-1.28	0.02	-1.21	-1.32	0.11
Clothing	0.13	0.07	0.06	0.06	-0.03	0.10
Leather Products	2.85	2.81	0.04	2.84	2.69	0.16
Footwear	0.63	0.89	-0.25	0.81	0.83	-0.02
Wood Products	-0.73	-0.57	-0.16	-0.62	-0.56	-0.06
Furniture	-1.57	-0.96	-0.61	-1.20	-0.97	-0.24
Paper Products	-4.92	-2.82	-2.10	-4.07	-2.62	-1.45
Printing, Publishing	-2.20	-0.49	-1.71	-1.37	-0.44	-0.93
Chemicals	-3.09	-2.70	-0.39	-2.72	-2.64	-0.09
Petroleum Products	3.85	2.91	0.93	3.47	2.53	0.95
Rubber Products	-1.29	-0.91	-0.38	-1.07	-0.98	-0.09
Nonmetal Min. Products	0.87	0.60	0.27	0.78	0.55	0.23
Glass Products	-0.18	-0.06	-0.11	-0.11	-0.13	0.02
Iron, Steel	-2.81	-1.18	-1.63	-1.93	-0.79	-1.14
Nonferrous Metals	3.54	3.34	0.21	3.29	3.06	0.24
Metal Products	-2.12	-0.10	-2.02	-1.51	-0.16	-1.35
Nonelec. Machinery	-12.60	-10.43	-2.18	-10.62	-9.24	-1.38
Electrical Machinery	-5.89	-3.60	-2.29	-4.45	-2.96	-1.50
Transport Equipment	-6.23	-3.97	-2.26	-5.06	-3.59	-1.46
Misc. Mfrs.	-2.76	-2.25	-0.52	-2.33	-2.15	-0.18
Mining, Quarrying	5.10	5.18	-0.08	4.74	4.78	-0.04
Utilities	-0.91	0.00	-0.91	-0.73	0.00	-0.73
Construction	-0.85	0.00	-0.85	-0.75	0.00	-0.75
Wholesale Trade	-4.96	0.00	-4.96	-3.90	0.00	-3.90
Transportation	-1.77	0.00	-1.77	-1.40	0.00	-1.40
Financial Services	-1.41	0.00	-1.41	-1.22	0.00	-1.22
Personal Services	-1.05	0.00	-1.05	-0.88	0.00	-0.88
Total	-0.95	-0.42		-0.69	-0.40	

TABLE 21

SCALE EFFECTS ON MEXICO

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE

ARGENTINA, BRAZIL, CHILE AND COLOMBIA

TARIFFS ONLY

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firm	Output	No. Firms	Output per firm
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	-0.04	0.00	-0.04	-0.04	0.00	-0.04
Food	-0.06	-0.09	0.03	-0.07	-0.09	0.01
Textiles	0.15	0.09	0.06	0.12	0.09	0.03
Clothing	-0.09	-0.14	0.05	-0.11	-0.13	0.03
Leather Products	-0.16	-0.19	0.04	-0.16	-0.18	0.02
Footwear	-0.10	-0.13	0.03	-0.10	-0.11	0.01
Wood Products	0.30	0.28	0.02	0.32	0.30	0.02
Furniture	0.19	0.16	0.03	0.19	0.18	0.01
Paper Products	0.11	0.07	0.04	0.08	0.06	0.02
Printing, Publishing	-0.04	-0.08	0.04	-0.10	-0.13	0.03
Chemicals	0.23	0.15	0.08	0.19	0.14	0.04
Petroleum Products	-0.24	-0.29	0.05	-0.26	-0.29	0.03
Rubber Products	0.01	-0.05	0.06	-0.01	-0.05	0.03
Nonmetal Min. Products	-0.02	-0.04	0.02	-0.03	-0.04	0.01
Glass Products	0.09	0.04	0.05	0.06	0.02	0.04
Iron, Steel	0.04	-0.02	0.06	0.01	-0.02	0.03
Nonferrous Metals	0.26	0.21	0.05	0.23	0.19	0.04
Metal Products	0.05	0.00	0.05	0.03	0.00	0.02
Nonelec. Machinery	0.12	0.05	0.07	0.11	0.07	0.04
Electrical Machinery	0.30	0.24	0.06	0.27	0.24	0.03
Transport Equipment	0.16	0.09	0.07	0.11	0.07	0.03
Misc. Mfrs.	1.25	1.19	0.06	1.21	1.17	0.04
Mining, Quarrying	-0.06	-0.07	0.01	-0.03	-0.03	0.01
Utilities	0.02	0.01	0.02	0.00	0.01	0.00
Construction	0.00	0.00	0.00	-0.01	0.00	-0.01
Wholesale Trade	-0.01	0.00	-0.01	-0.02	0.00	-0.02
Transportation	0.00	0.00	0.00	-0.01	0.00	-0.01
Financial Services	-0.02	0.00	-0.02	-0.02	0.00	-0.02
Personal Services	-0.02	0.00	-0.02	-0.02	0.00	-0.02
Total	0.03	0.01		0.01	0.02	

TABLE 22

SCALE EFFECTS ON CHILE

COMPARISON OF MICHIGAN MODEL DATABASE TO TYBOUT-WESTBROOK RETURNS TO SCALE ESTIMATES

EXPANSION OF NAFTA TO INCLUDE CHILE

TARIFFS PLUS CAPITAL FLOWS

Percent Change

SECTOR	Michigan Model Database			Tybout-Westbrook Scale Estimates		
	Output	No. Firms	Output per firm	Output	No. Firms	Output per firm
	(2)	(3)	(4)	(5)	(6)	(7)
Agriculture	3.84	0.00	3.84	4.09	0.00	4.09
Food	4.38	2.36	2.02	4.18	2.60	1.58
Textiles	4.80	2.38	2.41	3.45	2.02	1.43
Clothing	4.66	1.96	2.70	3.47	1.88	1.59
Leather Products	4.87	1.80	3.06	3.51	1.47	2.04
Footwear	5.17	1.96	3.21	3.91	1.91	2.00
Wood Products	3.65	1.97	1.68	3.71	2.63	1.09
Furniture	4.41	1.98	2.43	3.18	1.53	1.65
Paper Products	4.62	2.33	2.28	3.53	1.75	1.78
Printing, Publishing	4.50	0.93	3.57	3.12	0.83	2.29
Chemicals	3.08	0.04	3.04	1.31	-0.57	1.88
Petroleum Products	4.98	2.51	2.47	4.72	2.26	2.45
Rubber Products	3.84	1.00	2.84	2.48	0.73	1.76
Nonmetal Min. Products	4.72	2.05	2.67	4.30	2.40	1.89
Glass Products	3.60	1.82	1.78	2.89	1.34	1.55
Iron, Steel	4.96	1.91	3.05	4.74	1.91	2.84
Nonferrous Metals	10.78	7.64	3.15	9.44	7.27	2.17
Metal Products	4.91	1.92	3.00	4.58	1.97	2.61
Nonelec. Machinery	0.49	-2.58	3.07	-1.91	-3.85	1.94
Electrical Machinery	1.82	-2.56	4.37	0.75	-2.85	3.60
Transport Equipment	0.60	-3.65	4.25	-3.23	-5.92	2.68
Misc. Mfrs.	5.19	1.76	3.43	2.59	0.83	1.76
Mining, Quarrying	7.03	4.55	2.48	6.88	4.64	2.24
Utilities	5.68	0.05	5.62	5.51	0.07	5.43
Construction	4.76	0.00	4.76	4.75	0.00	4.75
Wholesale Trade	5.07	0.00	5.07	4.67	0.00	4.67
Transportation	4.95	0.00	4.95	4.80	0.00	4.79
Financial Services	4.61	0.00	4.61	4.44	0.00	4.44
Personal Services	2.75	0.00	2.75	2.36	0.00	2.36
Total	5.30	3.67		4.85	3.68	

TABLE 23

CHILE EXPORTS: 1980-1990

Millions U.S. Dollars

SECTOR	1980 (2)	1990 (3)	Percent Change (4)
Agriculture	435.27	1063.43	144.32
Food	330.73	1162.80	251.59
Textiles	16.26	39.63	143.73
Clothing	1.81	40.76	2151.93
Leather Products	1.26	2.05	62.70
Footwear	0.68	38.20	5517.65
Wood Products	93.65	448.08	378.46
Furniture	1.26	26.04	1966.67
Paper Products	216.49	397.35	83.54
Printing, Publishing	1.85	21.57	1065.95
Chemicals	104.41	282.92	170.97
Petroleum Products	10.45	45.68	337.13
Rubber Products	5.42	28.36	423.25
Nonmetal Min. Products	22.20	15.64	-29.55
Glass Products	10.13	3.22	-68.21
Iron, Steel	28.20	71.40	153.19
Nonferrous Metals	2920.30	3866.36	32.40
Metal Products	33.31	29.88	-10.30
Nonelec. Machinery	11.03	17.85	61.83
Electrical Machinery	11.58	11.97	3.37
Transport Equipment	7.58	66.44	776.52
Misc. Mfrs.	26.38	393.33	1391.02
Mining, Quarrying	989.95	951.48	-3.89
Utilities	n.a.	0.08	
Construction	n.a.	0.14	
Wholesale Trade	n.a.	0.48	
Transportation	n.a.	1.04	
Financial Services	n.a.	0.20	
Personal Services	n.a.	0.15	
TOTAL	5280.20	9026.53	

Sources: Michigan Model Data Base.

TABLE 24

SECTORAL EFFECTS ON CHILE

EXPANSION OF NAFTA TO INCLUDE CHILE

TARIFFS ONLY

1980 DATABASE

Percent Change

SECTOR	EXPORTS (2)	IMPORTS (3)	BILATERAL IMPORTS ARG (4)	BRZ (5)	CND (6)	COL (7)	MEX (8)	US (9)	Output (10)	No. Firms (11)	Output per firm (12)
Agriculture	3.97	11.65	-3.92	-3.94	25.59	-4.02	25.62	25.56	-1.31	0.00	
Food	3.40	0.65	-2.85	-2.84	26.66	-2.95	26.69	26.63	-0.17	-0.65	0.48
Textiles	3.63	2.66	-3.54	-3.56	26.04	-3.66	26.02	25.95	-1.38	-1.80	0.42
Clothing	15.28	2.81	-2.75	-2.78	26.80	-2.86	26.80	26.74	-0.95	-1.19	0.24
Leather Products	14.65	-0.22	-2.70	-2.70	26.83	-2.80	26.84	26.77	0.02	-0.23	0.25
Footwear	11.40	1.31	-2.38	-2.38	27.16	-2.49	27.16	27.10	-0.60	-0.75	0.14
Wood Products	3.11	4.80	-3.61	-3.58	25.92	-3.67	25.96	25.89	0.27	-0.14	0.41
Furniture	5.14	4.44	-3.05	-3.09	26.44	-3.18	26.47	26.40	-1.43	-1.73	0.30
Paper Products	4.50	3.81	-4.68	-4.66	24.85	-4.80	24.88	24.83	1.20	0.39	0.81
Printing, Publishing	3.32	5.39	-3.14	-3.16	26.34	-3.26	26.40	26.31	-0.86	-1.39	0.53
Chemicals	4.51	6.56	-4.47	-4.48	25.06	-4.57	25.08	25.02	-1.81	-2.41	0.60
Petroleum Products	3.65	-1.58	-2.09	-2.14	27.44	-2.20	27.44	27.42	1.47	0.83	0.64
Rubber Products	4.09	1.01	-2.96	-2.99	26.57	-3.07	26.58	26.51	-0.41	-0.71	0.31
Nonmetal Min. Products	4.46	3.35	-3.30	-3.33	26.22	-3.40	26.23	26.17	-0.09	-0.59	0.50
Glass Products	2.31	2.66	-3.70	-3.71	25.84	-3.79	25.86	25.78	-1.80	-2.06	0.26
Iron, Steel	3.24	2.12	-3.19	-3.18	26.28	-3.32	26.33	26.27	-0.23	-0.57	0.34
Nonferrous Metals	7.19	0.28	-5.67	-6.06	23.91	-5.80	23.89	23.90	6.22	5.38	0.84
Metal Products	3.92	5.69	-3.76	-3.74	25.68	-3.93	25.73	25.66	-0.80	-1.29	0.49
Nonelec. Machinery	0.87	4.85	-6.00	-6.00	23.47	-6.13	23.52	23.44	-5.58	-6.03	0.44
Electrical Machinery	5.34	1.05	-3.52	-3.49	25.91	-3.67	25.97	25.87	-1.12	-1.63	0.51
Transport Equipment	3.23	3.65	-4.85	-4.89	43.46	-4.96	43.50	43.42	-3.09	-3.65	0.56
Misc. Mfrs.	3.46	1.87	-4.36	-4.40	25.15	-4.48	25.17	25.07	-1.77	-2.35	0.58
Mining, Quarrying	4.54	2.40	-1.22	-1.18	28.26	-1.33	28.29	28.25	3.45	3.00	0.45
Utilities									0.69		
Construction									-0.30		
Wholesale Trade									-0.34		
Transportation									0.05		
Financial Services									-0.50		
Personal Services									-0.35		
Total	5.84	2.57	-3.32	-4.28	26.90	-3.46	27.32	27.35	1.07	1.73	