

Online Appendix:
The Breakdown of Industrial Opposition to Trade:
Firms, Product Variety, and Reciprocal Liberalization

Iain Osgood

World Politics, Vol. 69, No. 1, January 2017
doi: 10.1017/S00043887116000174

Appendix A: Cases and Data

Cases

This paper considers data from the following trade agreements and other reciprocal liberalization measures.

- Australia-US Free Trade Agreement (AUSFTA)
- Dominican Republic-Central America Free Trade Agreement (CAFTA-DR)
- Chile Free Trade Agreement
- Free Trade Agreement of the Americas (Failed)
- Jordan Free Trade Agreement
- Korea-US Free Trade Agreement (KORUS)
- U.S.-Panama Trade Agreement and U.S.-Colombia Trade Agreement (Treated jointly)
- Bahrain Free Trade Agreement; Morocco Free Trade Agreement; Oman Free Trade Agreement;
- United Arab Emirates-US Free Trade Agreement (Not ratified) (Treated jointly)
- Peru-US Trade Promotion Agreement
- Singapore-US Free Trade Agreement
- Permanent Normal Trade Relations with China
- Permanent Normal Trade Relations with Russia

Imputed positions

A small number of association positions are imputed, because the agreement explicitly excluded liberalization of a particular industry, whether their own or a supplying upstream industry. All of these cases are listed below, and the reasoning is mentioned in brief. These cases are all associations, because they tend to occur in agricultural industries. "Oppose:ImputeFavor" implies that the association publicly opposed the agreement, but they are treated as likely supporter, should the agreement have included full liberalization.

Australia-US Free Trade Agreement (AUSFTA)

National Association of Wheat Growers; Oppose:ImputeFavor

U.S. Wheat Associates; Oppose:ImputeFavor

Wheat Export Trade Education Committee; Oppose:ImputeFavor

-Australia was permitted to maintain its Wheat Board, which certain agricultural groups contended would suppress competition in the Australian market.

American Sugar Alliance; Favor:ImputeOppose

Grocery Manufacturers Association; Oppose:ImputeFavor

Australia Sugar Milling Council; Oppose:ImputeFavor

Australian Cane Farmers Association; Oppose:ImputeFavor

Australian Cane Growers Council; Oppose:ImputeFavor

Cattle Council of Australia; Oppose:ImputeFavor

-The US Sugar industry avoided substantive liberalization; "sugar was excluded from the agreement..."¹ The GMA opposed the agreement because sugar was excluded, and beef, to an extent.

¹ USITC. "US-Australia Free Trade Agreement: Potential Economywide and Selected Sectoral Effects." pg. xv.

The agreement "...includes no increases for imports of Australian-grown sugar and only minimal increases for beef and dairy products."²

Korea-US Free Trade Agreement (KORUS)

USA Rice Federation; Oppose:ImputeFavor

US Rice Producers Association; Oppose:ImputeFavor

Rice Millers' Association; Oppose:ImputeFavor

-The rice producing associations opposed the agreement because rice was largely excluded from the agreement. E.g. "USA Rice does not support the agreement as it stands due to the exclusion of rice. Free trade agreements entered into by the US should be comprehensive and include all products even those that are politically sensitive."³

US-Peru Trade Promotion Agreement

Travel Goods Association; Oppose:ImputeFavor

-"The Travel Goods Association (TGA) does not support the U.S.-Peru TPA. TGA states that the TPA has highly restrictive provisions on textile travel goods that prevent U.S. travel goods companies from using the best available inputs."⁴

Sales data

Total industry receipts are taken from the US Economic Census of 2007 as a measure of industry size. 2007 is therefore used as a base year for all covariates, wherever possible. For agricultural products, data were gathered from 'QuickStats', a website created by the National Agricultural Statistics Service available at <http://quickstats.nass.usda.gov/>. The data come from the Agricultural Census of the United States. To gather the data, select: Program: Census > Sector: Economics > Group: Income > Commodity: Commodity Totals > Category: Sales > Data Item: Commodity Totals - Sales Measured in \$ > Domain: NAICS Classification. For mining products, "Products shipments or receipts for services, value (\$1,000)" are taken from the table EC0721SX1 available at factfinder.census.gov. For manufactured products, the "Total value of shipments (\$1,000) (RCPTOT)" column is taken from the "Manufacturing: Industry Series: Detailed Statistics by Industry for the United States: 2007" from the 2007 Economic Census of the United States which is also available from factfinder.census.gov. NAICS codes were concorded by hand from 2007 to 2012 codes to ensure complete coverage.

² Congressional Research Service. "Agriculture in the Australia-U.S. Free Trade Agreement". September 29 2004. <http://www.cnie.org/nle/crsreports/briefingbooks/Agriculture/Agriculture%20in%20the%20Australia-US.htm>. Accessed on: October 19 2014.

³ U.S. Congress. House of Representatives. Committee on Ways and Means. 2011. The Pending Free Trade Agreements with Colombia, Panama and South Korea and the Creation of US Jobs. 112th Congress, 1st session, January 25. <http://www.gpo.gov/fdsys/pkg/CHRG-112hrg67469/html/CHRG-112hrg67469.htm> Accessed on: October 2, 2014.

⁴ United States International Trade Commission. 2006. U.S.-Peru Trade Promotion Agreement: Potential Economy-wide and Selected Sectoral Effects. Investigation No. TA-2104-20. From USITC Website. <http://www.usitc.gov/publications/docs/pubs/2104f/pub3855.pdf> Accessed on October 7 2014. pg. 3-25.

Tariff and trade data

The primary source for the tariff data is wits.worldbank.org. Tariffs are at the 6-digit HS 2007 level and concorded, as averages, into 5-digit SITC Revision 4 codes. This concordance was also taken from WITS. These tariff data are also matched with corresponding trade flows data from WITS, also at the 5-digit SITC Revision 4 level. However, the main source of trade data is data gathered from Schott, Peter K. "The Relative Sophistication of Chinese Exports." *Economic Policy* 23.53 (2008): 5-49 which are available at faculty.som.yale.edu/peterschott. Import and export data from 2007 are used. Because these data use 2007 NAICS codes, some 2012 NAICS slots are miscoded or missing. A concordance is used to deal with the former. All 0 or missing trade values are filled in with SITC-based trade flows, if they are non-zero. The SITC-to-NAICS concordance was constructed by the author.

Product differentiation

As described in the text, the Rauch (1999) coding of industries into exchange-trade products, reference-priced products, and fully differentiated products is employed here. These are measured at the SITC Revision 2.1 standard, which is concorded to SITC 4 and then into NAICS codes. The codes are available online at www.macalester.edu/research/economics/PAGE/HAVEMAN/Trade.Resources/TradeData.html. In general, the modal differentiation code for the various SITC codes mapping into a NAICS code is used. Some codes, however, were recoded by the author to improve face validity.

The following industries were coded by the author to be Homogeneous products: "Pork", "Sugar", "Goats", "Crude Petroleum and Natural Gas Extraction", "Natural Gas Liquid Extraction", "Bituminous coal and lignite surface mining", "Bituminous coal underground mining", "Anthracite mining", "Gold ore mining", "Silver ore mining", "Lead Ore and Zinc Ore Mining", "Copper Ore and Nickel Ore Mining", "Uranium-Radium-Vanadium mining", "Rice milling", "Wet corn milling", "Soybean and oilseed processing", "Petroleum refineries", "Frozen fruit juice and vegetable", "Smelting and alloying of aluminum". (19 total)

The following industries were coded by the author to be Moderately differentiated products: "Tree Nuts", "Canned fruits and vegetables", "Specialty canning", "Spices and extracts", "Cattle ranching", "Cattle feedlots", "Dairy cattle", "Non-poultry processing", "Poultry processing", "Non-poultry processing", "Fat and oils refining", "Bottled water", "Textile bags and canvas", "Rope, cordage, tire fabric", "Sawmills", "Wood preservation", "Truss manufacturing", "Reconstituted wood product", "Engineered wood", "Wood Window and Door Manufacturing", "Cut stock resawing lumber and planing", "Other millwork", "Wood containers and pallets", "Asphalt", "Lubricants", "Plastic bottles", "Polystyrene foam", "Brick and tile manufacturing", "Flat glass", "Ready-Mix Concrete Manufacturing", "Concrete Block and Brick Manufacturing", "Concrete Pipe Manufacturing", "Other concrete products", "Gypsum Product Manufacturing", "Mineral wool", "Copper rolling, drawing and extruding", "Other non-ferrous metal foundries", "Engineered wood", "Reconstituted wood product", "Fluid milk", "Butter", "Evaporated or condensed milk", "Synthetic rubber", "Soybean and oilseed processing", "Other non-ferrous metal foundries", "Dairy cattle". (46 Total.)

The following industries were coded by the author to be Differentiated products: "Frozen specialty foods", "Confectionary", "Cheese", "Ice cream and frozen desserts", "Wineries", "Breweries", "Distilleries", "Tobacco manufacturing", "Fiber, yarn and thread", "Phosphate rocks", "Adhesives", "Surface active agents", "Custom compounding of resins", "Custom roll forming", "Powder metallurgy parts", "Dyes and pigments", "Lubricants", "Paperboard

boxes", "Wood Window and Door Manufacturing", "Laminated plastic plate sheet and shape", "Plastic pipe", "All other electronic equipment" (22 Total.)

The complete set of codings is provided below.

No.	NAICS code	NAICS short description	Product differentiation
1	111110	Soybeans	Homogeneous
2	111120	Oilseeds	Homogeneous
3	111130	Peas and Beans	Homogeneous
4	111140	Wheat	Homogeneous
5	111150	Corn	Homogeneous
6	111160	Rice	Homogeneous
7	111199	Other grains	Homogeneous
8	112111	Potatos	Homogeneous
9	112119	Other vegetables	Mod. differentiated
10	111310	Oranges	Mod. differentiated
11	111320	Other citrus	Mod. differentiated
12	111331	Apples	Mod. differentiated
13	111332	Grapes	Mod. differentiated
14	111333	Strawberry	Mod. differentiated
15	111334	Other berries	Mod. differentiated
16	111335	Tree Nuts	Mod. differentiated
17	111339	Other fruit farming	Mod. differentiated
18	111411	Mushrooms	Differentiated
19	111421	Nursery and tree farming	Differentiated
20	111422	Flowers	Differentiated
21	111910	Tobacco	Homogeneous
22	111920	Cotton	Homogeneous
23	111930	Sugar	Homogeneous
24	111940	Hay	Mod. differentiated
25	111991	Sugar beets	Mod. differentiated
26	111992	Peanuts	Homogeneous
27	112111	Cattle ranching	Mod. differentiated
28	112112	Cattle feedlots	Mod. differentiated
29	112120	Dairy cattle	Mod. differentiated
30	112210	Pork	Homogeneous
31	112310	Eggs	Mod. differentiated
32	112320	Chicken	Homogeneous
33	112330	Turkey	Homogeneous
34	112410	Sheep	Homogeneous
35	112420	Goats	Homogeneous
36	112910	Apiculture	Mod. differentiated
37	112920	Horses and other equines	Differentiated
38	112930	Fur-bearing animals	Differentiated
39	112990	Other animals	Homogeneous
40	211111	Crude Petroleum and Natural Gas Extraction	Homogeneous

41	211112	Natural Gas Liquid Extraction	Homogeneous
42	212111	Bituminous coal and lignite surface mining	Homogeneous
43	212112	Bituminous coal underground mining	Homogeneous
44	212113	Anthracite mining	Homogeneous
45	212210	Iron ore mining	Homogeneous
46	212221	Gold ore mining	Homogeneous
47	212222	Silver ore mining	Homogeneous
48	212231	Lead Ore and Zinc Ore Mining	Homogeneous
49	212234	Copper Ore and Nickel Ore Mining	Homogeneous
50	212291	Uranium-Radium-Vanadium mining	Homogeneous
51	212299	Rare earth and other metals mining	Homogeneous
52	212311	Dimensions stone mining	Differentiated
53	212312	Crushed limestone	Mod. differentiated
54	212313	Crushed granite	Mod. differentiated
55	212319	Construction sand and gravel	Mod. differentiated
56	212321	Industrial sand	Mod. differentiated
57	212324	Kaolin and ball clay	Mod. differentiated
58	212325	Clay and ceramics	Mod. differentiated
59	212391	Potash, soda, and borate mining	Mod. differentiated
60	212392	Phosphate rocks	Differentiated
61	212393	Other chemical and fertilizer mining	Mod. differentiated
62	311111	Dog and cat food	Mod. differentiated
63	311119	Animal feed	Mod. differentiated
64	311211	Flour milling	Mod. differentiated
65	311212	Rice milling	Homogeneous
66	311221	Wet corn milling	Homogeneous
67	311224	Soybean and oilseed processing	Mod. differentiated
68	311225	Fat and oils refining	Mod. differentiated
69	311230	Breakfast cereal	Mod. differentiated
70	311313	Beet sugar	Homogeneous
71	311314	Cane sugar	Homogeneous
72	311340	Confectionary	Differentiated
73	311351	Chocolate	Differentiated
74	311411	Frozen fruit juice and vegetable	Homogeneous
75	311412	Frozen specialty foods	Differentiated
76	311421	Canned fruits and vegetables	Mod. differentiated
77	311422	Specialty canning	Mod. differentiated
78	311423	Dried and dehydrated food	Mod. differentiated
79	311424	Dried and dehydrated onions	Mod. differentiated
80	311511	Fluid milk	Mod. differentiated
81	311512	Butter	Mod. differentiated

82	311513	Cheese	Differentiated
83	311514	Evaporated or condensed milk	Mod. differentiated
84	311520	Ice cream and frozen desserts	Differentiated
85	311611	Non-poultry processing	Mod. differentiated
86	311612	Meat products	Mod. differentiated
87	311613	Animal fats	Homogeneous
88	311615	Poultry processing	Mod. differentiated
89	311710	Seafood Products	Mod. differentiated
90	311811	Retail Bakeries	Differentiated
91	311812	Commercial Bakeries	Differentiated
92	311813	Frozen Cakes Pies and Other Pastries	Differentiated
93	311821	Cookies and crackers	Differentiated
94	311824	Pasta	Differentiated
95	311830	Tortillas	Mod. differentiated
96	311911	Roasted nuts and peanut butter	Mod. differentiated
97	311919	Snack foods	Differentiated
98	311920	Coffee and tea	Homogeneous
99	311930	Flavoring syrups and concentrates	Differentiated
100	311941	Mayonaisse dressing and prepared sauces	Differentiated
101	311942	Spices and extracts	Mod. differentiated
102	311991	Persihable food products	Differentiated
103	312111	Non-alcoholic beverages	Differentiated
104	312112	Bottled water	Mod. differentiated
105	312120	Breweries	Differentiated
106	312130	Wineries	Differentiated
107	312140	Distilleries	Differentiated
108	312230	Tobacco manufacturing	Differentiated
109	313110	Fiber, yarn and thread	Differentiated
110	313210	Broadwoven fabric mills	Differentiated
111	313220	Narrow fabric and schiffli embroidery	Differentiated
112	313230	Nonwoven Fabric Mills	Differentiated
113	313240	Knit Fabric Mills	Differentiated
114	313310	Textile and fabric finishing	Differentiated
115	313320	Fabric coatings	Differentiated
116	314110	Carpet and rug mills	Differentiated
117	314120	Curtain and linen mills	Differentiated
118	314910	Textile bags and canvas	Mod. differentiated
119	314994	Rope, cordage, tire fabric	Mod. differentiated
120	315110	Hosiery and socks	Differentiated
121	315190	Knit apparel	Differentiated
122	315210	Cut and sew apparel contractors	Differentiated

123	315220	Mens cut and sew apparel	Differentiated
124	315240	Womens cut and sew apparel	Differentiated
125	315280	Uniforms	Differentiated
126	315990	Apparel accessories	Differentiated
127	316110	Leather and hide tanning	Differentiated
128	316210	Footwear	Differentiated
129	316992	Leather handbags and purses	Differentiated
130	316998	All other leather goods	Differentiated
131	321113	Sawmills	Mod. differentiated
132	321114	Wood preservation	Mod. differentiated
133	321211	Hardwood veneer and plywood	Mod. differentiated
134	321212	Softwood veneer and plywood	Mod. differentiated
135	321213	Engineered wood	Mod. differentiated
136	321214	Truss manufacturing	Mod. differentiated
137	321219	Reconstituted wood product	Mod. differentiated
138	321911	Wood Window and Door Manufacturing	Differentiated
139	321912	Cut stock resawing lumber and planing	Mod. differentiated
140	321918	Other millwork	Mod. differentiated
141	321920	Wood containers and pallets	Mod. differentiated
142	321991	Manufactured homes	Differentiated
143	321992	Wood buildings	Differentiated
144	321999	Other wood products	Differentiated
145	322110	Pulp mills	Mod. differentiated
146	322121	Paper mills	Mod. differentiated
147	322122	Newsprint mills	Mod. differentiated
148	322130	Paperboard mills	Mod. differentiated
149	322211	Corrugated and solid fiber boxes	Mod. differentiated
150	322212	Paperboard boxes	Differentiated
151	322220	Paper bags and coated papers	Mod. differentiated
152	322230	Stationary products	Differentiated
153	322291	Sanitary paper products	Differentiated
154	324110	Petroleum refineries	Homogeneous
155	324121	Asphalt	Mod. differentiated
156	324122	Asphalt shingles	Mod. differentiated
157	324191	Lubricants	Differentiated
158	324199	Other coke and petroleum products	Mod. differentiated
159	325110	Petrochemicals	Mod. differentiated
160	325120	Industrial gases	Mod. differentiated
161	325130	Dyes and pigments	Differentiated
162	325180	Other inorganic chemicals	Mod. differentiated
163	325193	Ethyl alcohol	Mod. differentiated

164	325194	Cyclic crudes, intermediates, gum and wood chemicals	Mod. differentiated
165	325199	All other basic organic chemicals	Mod. differentiated
166	325211	Plastics materials and resins	Mod. differentiated
167	325212	Synthetic rubber	Mod. differentiated
168	325220	Synthetic fibers	Mod. differentiated
169	325311	Nitrogenous fertilizer manufacturing	Mod. differentiated
170	325312	Phosphatic fertilizer	Mod. differentiated
171	325314	Fertilzier for mixing	Mod. differentiated
172	325320	Pesticides and agricultural chemicals	Differentiated
173	325411	Medicinal and botanicals	Mod. differentiated
174	325412	Pharmaceutical preparations	Differentiated
175	325413	In vitro diagnostics	Differentiated
176	325414	Biological products	Differentiated
177	325510	Paint and coatings	Differentiated
178	325520	Adhesives	Differentiated
179	325611	Soap and cleaning compounds	Differentiated
180	325612	Polish and other sanitation goods	Differentiated
181	325613	Surface active agents	Differentiated
182	325620	Toilet preparations	Differentiated
183	325910	Printing ink	Differentiated
184	325920	Explosives	Mod. differentiated
185	325991	Custom compounding of resins	Differentiated
186	325992	Photography film, paper, chemicals	Differentiated
187	326111	Plastic bags	Mod. differentiated
188	326112	Plastic packaging film and sheet	Mod. differentiated
189	326113	Unlaminated plastic film and sheet	Mod. differentiated
190	326121	Unlaminated plastic shapes	Mod. differentiated
191	326122	Plastic pipe	Differentiated
192	326130	Laminated plastic plate sheet and shape	Differentiated
193	326140	Polystyrene foam	Mod. differentiated
194	326150	Urethane products	Mod. differentiated
195	326160	Plastic bottles	Mod. differentiated
196	326191	Plastic plumbing fixtures	Differentiated
197	326199	Other plastic products	Differentiated
198	326211	Tire manufacturing	Differentiated
199	326220	Rubber and plastic hoses and belting	Differentiated
200	326291	Rubbers goods for mechanical applications	Differentiated
201	326299	All other rubber products	Differentiated
202	327110	Pottery, ceramics, and plumbing fixture	Differentiated
203	327120	Brick and tile manufacturing	Mod. differentiated
204	327211	Flat glass	Mod. differentiated

205	327212	Pressed, blown glass and glassware	Differentiated
206	327213	Glass containers	Differentiated
207	327215	Glass products made of purchased glass	Differentiated
208	327310	Cement	Mod. differentiated
209	327320	Ready-Mix Concrete Manufacturing	Mod. differentiated
210	327331	Concrete Block and Brick Manufacturing	Mod. differentiated
211	327332	Concrete Pipe Manufacturing	Mod. differentiated
212	327390	Other concrete products	Mod. differentiated
213	327410	Lime manufacturing	Mod. differentiated
214	327420	Gypsum Product Manufacturing	Mod. differentiated
215	327910	Abrasive products	Differentiated
216	327991	Cut stone and stone products	Differentiated
217	327992	Ground or treated minerals or earth	Mod. differentiated
218	327993	Mineral wool	Mod. differentiated
219	331110	Iron and Steel Mills	Mod. differentiated
220	331210	Steel and Iron Pipe	Differentiated
221	331221	Rolled steel shapes	Mod. differentiated
222	331222	Steel Wire	Differentiated
223	331313	Aluminum refining	Homogeneous
224	331314	Smelting and alloying of aluminum	Homogeneous
225	331315	Aluminum sheet plate and foil	Mod. differentiated
226	331318	Other aluminum rolling drawing extruding	Mod. differentiated
227	331410	Nonferrous metal smelting and refining	Homogeneous
228	331420	Copper rolling, drawing and extruding	Mod. differentiated
229	331491	Nonferrous metal rolling drawing and extruding	Differentiated
230	331492	Secondary smelting alloying and refining of nonferrous metal	Homogeneous
231	331511	Iron foundries	Differentiated
232	331512	Steel investment foundries	Differentiated
233	331513	Other steel foundries	Mod. differentiated
234	331523	Non-ferrous metal die-casting	Mod. differentiated
235	331524	Aluminum foundries	Mod. differentiated
236	331529	Other non-ferrous metal foundries	Mod. differentiated
237	332111	Iron and steel forging and stamping	Mod. differentiated
238	332114	Custom roll forming	Differentiated
239	332117	Powder metallurgy parts	Differentiated
240	332119	Metal crowns closures and other stamping	Differentiated
241	332215	Cutlery and metal cookware	Differentiated
242	332216	Handtools	Differentiated
243	332311	Metal buildings and components	Differentiated
244	332312	Fabricated structural metal	Differentiated
245	332313	Metal plate work	Differentiated

246	332321	Metal windows and doors	Differentiated
247	332322	Sheet metal work	Differentiated
248	332323	Architectural metal work	Differentiated
249	332410	Boilers	Differentiated
250	332420	Metal tanks	Differentiated
251	332431	Metal cans, boxes and containers	Differentiated
252	332439	Other metal containers	Differentiated
253	332510	Hardware	Differentiated
254	332613	Springs	Differentiated
255	332618	Other wire products	Differentiated
256	332710	Machine shops	Mod. differentiated
257	332721	Turned products	Mod. differentiated
258	332722	Bolt, nut, screw and rivet manufacturing	Differentiated
259	332911	Industrial valves	Differentiated
260	332912	Fluid power valves	Differentiated
261	332913	Plumbing fixture and trims	Differentiated
262	332919	Other metal valves	Differentiated
263	332991	Ball and roller bearings	Differentiated
264	332992	Small arms ammunition	Differentiated
265	332993	Other ammunition	Differentiated
266	332994	Small arms	Differentiated
267	332996	Fabricated pipe and pipe fittings	Differentiated
268	333111	Farm machinery	Differentiated
269	333112	Lawn and Garden Equipment	Differentiated
270	333120	Construction machinery	Differentiated
271	333131	Mining machinery	Differentiated
272	333132	Oil and gas field machinery	Differentiated
273	333241	Food product machinery	Differentiated
274	333242	Semiconductor machinery	Differentiated
275	333243	Sawmill, woodworking and paper machinery	Differentiated
276	333244	Printing machinery and equipment	Differentiated
277	333248	Textile machinery	Differentiated
278	333249	Plastics machinery	Differentiated
279	333314	Optical instrument and lens manufacturing	Differentiated
280	333316	Photographic and photocopying equipment manufacturing	Differentiated
281	333318	Other commercial and service industry machinery	Differentiated
282	333413	Fan and blower and air purification equipment	Differentiated
283	333414	Heating equipment	Differentiated
284	333415	Air-conditioning and refrigeration equipment	Differentiated
285	333511	Industrial molds	Differentiated
286	333514	Special dies, tools, jigs	Differentiated

287	333515	Cutting tools and machine accessories	Differentiated
288	333517	Machine tools	Differentiated
289	333519	Rolling mill and other metalworking machinery	Differentiated
290	333611	Turbines and turbine generators	Differentiated
291	333612	Speed changers, drives, gears	Differentiated
292	333613	Mechanical power transmission	Differentiated
293	333618	Engines, except auto and aircraft	Differentiated
294	333911	Pumps and pumping equipment	Differentiated
295	333912	Air and gas compressors	Differentiated
296	333913	Measuring and dispensing pumps	Differentiated
297	333921	Elevators and escalators	Differentiated
298	333922	Conveyors	Differentiated
299	333923	Overhead cranes and hoists	Differentiated
300	333924	Industrial trucks	Differentiated
301	333991	Power tools	Differentiated
302	333992	Welding equipment	Differentiated
303	333993	Packaging machinery	Differentiated
304	333994	Industrial process furnace and ovens	Differentiated
305	333995	Fluid power cylinder and actuators	Differentiated
306	333996	Fluid power pump and motor	Differentiated
307	333997	Scales and balances	Differentiated
308	334111	Computers	Differentiated
309	334112	Computer storage devices	Differentiated
310	334118	Computer terminals and other peripheral equipment	Differentiated
311	334210	Telephone apparatus	Differentiated
312	334220	Radio, television and wireless equipment	Differentiated
313	334290	Other communications equipment	Differentiated
314	334310	Audio and visual equipment	Differentiated
315	334412	Circuit boards	Differentiated
316	334413	Semiconductors	Differentiated
317	334416	Capacitors, resistors, transformers	Differentiated
318	334417	Electronic connector	Differentiated
319	334418	Printed circuit assembly	Differentiated
320	334419	Other electronic components	Differentiated
321	334510	Electromedical apparatus	Differentiated
322	334511	Navigational systems and instruments	Differentiated
323	334512	Environmental controls	Differentiated
324	334513	Instruments for industrial control	Differentiated
325	334514	Fluid meters and counting devices	Differentiated
326	334515	Electricity measuring instruments	Differentiated
327	334516	Analytical lab instruments	Differentiated

328	334517	Irradiation equipment	Differentiated
329	334519	Watches and clocks	Differentiated
330	334613	Blank magnetic and optical recording media	Differentiated
331	334614	Software and recording reproducing	Differentiated
332	335110	Light bulbs	Differentiated
333	335121	Residential light fixtures	Differentiated
334	335122	Commercial and industrial lighting	Differentiated
335	335129	Other lighting equipment	Differentiated
336	335210	Small electrical appliances	Differentiated
337	335221	Cooking appliances	Differentiated
338	335222	Refrigerators and freezers	Differentiated
339	335224	Household laundry equipment	Differentiated
340	335228	Other household appliances	Differentiated
341	335311	Power distribution equipment	Differentiated
342	335312	Electrical motor and generators	Differentiated
343	335313	Electrical switchboards and switchgears	Differentiated
344	335314	Relay and industrial control	Differentiated
345	335911	Storage batteries	Mod. differentiated
346	335912	Primary batteries	Mod. differentiated
347	335921	Fiber optic cable	Differentiated
348	335929	Other communications and energy wire	Differentiated
349	335931	Current-carrying wiring devices	Differentiated
350	335932	Non-current carrying wiring devices	Differentiated
351	335991	Carbon and graphite products	Differentiated
352	335999	All other electronic equipment	Differentiated
353	336111	Autos	Differentiated
354	336112	Light trucks	Differentiated
355	336120	Heavy duty trucks	Differentiated
356	336211	Motor vehicle bodies	Differentiated
357	336212	Truck trailers	Differentiated
358	336213	Motor homes	Differentiated
359	336214	Travel trailer and campers	Differentiated
360	336310	Motor vehicle engine parts	Differentiated
361	336320	Motor vehicle electrical parts	Differentiated
362	336330	Motor vehicle steering and suspension parts	Differentiated
363	336340	Motor vehicle brake systems	Differentiated
364	336350	Motor vehicle transmissions	Differentiated
365	336360	Motor vehicle seating and interior trim	Differentiated
366	336370	Motor vehicle metal stamping	Differentiated
367	336390	Other motor vehicle parts	Differentiated
368	336411	Aircraft manufacturing	Differentiated

369	336412	Aircraft engines and parts	Differentiated
370	336413	Aircraft parts	Differentiated
371	336414	Guided missile and space vehicles	Differentiated
372	336415	Space vehicle propulsion systems	Differentiated
373	336419	Other space vehicle parts	Differentiated
374	336510	Railroad rolling stock	Differentiated
375	336611	Ship building	Differentiated
376	336612	Boat building	Differentiated
377	336991	Motorcycles	Differentiated
378	336992	Armored vehicles	Differentiated
379	337110	Kitchen cabinets and countertops	Differentiated
380	337121	Upholstered household furniture	Differentiated
381	337122	Nonupholstered wood furniture	Differentiated
382	337124	Metal household	Differentiated
383	337125	Other household furniture	Differentiated
384	337127	Institutional furniture	Differentiated
385	337211	Wood office furniture	Differentiated
386	337212	Custom architectural woodwork	Differentiated
387	337214	Office furniture except wood	Differentiated
388	337215	Partitions shelving and lockers	Differentiated
389	337910	Mattresses	Differentiated
390	337920	Blinds and shades	Differentiated
391	339112	Surgical and medical instruments	Differentiated
392	339113	Surgical appliances and supplies	Differentiated
393	339114	Dental equipment and supplies	Differentiated
394	339115	Ophthalmic equipment	Differentiated
395	339910	Jewelry and silverware	Differentiated
396	339920	Sporting and athletic goods	Differentiated
397	339930	Dolls toys and games	Differentiated
398	339940	Non-paper office supplies	Differentiated
399	339950	Signs manufacturing	Differentiated
400	339991	Gaskets and seals	Differentiated
401	339992	Musical instruments	Differentiated
402	339993	Fasteners buttons needles and pins	Differentiated
403	339994	Brooms brushes and mops	Differentiated
404	339995	Burial caskets	Differentiated

The Broda and Weinstein (2006) estimates of the elasticity of substitution estimates are available at <http://www.columbia.edu/~dew35/TradeElasticities/TradeElasticities.html>.

FDI data

Data on foreign direct investment by the United States at the country level is only publicly available at a relatively high level of aggregation, usually the two- or three-digit NAICS code. There is however data on worldwide FDI by American businesses at the four-digit NAICS level. I assume that (potential) US FDI in the agreement countries is distributed similarly to US FDI worldwide within three-digit industries, in order to construct a four-digit NAICS measure of potential FDI in each market. The measure is at the four-digit level (indexed by j) but employs data at the two-digit level (indexed by i where $j \in i$).

$$\text{FDI potential}_j = \text{DIA}_i^{US,Partner} \cdot \frac{\text{DIA}_j^{US}}{\sum_j \text{DIA}_j^{US}}.$$

Each of these figures is taken from the US Direct Investment Abroad Tables produced by the Bureau of Economic Analysis.

In the case of two country-groups, there is no data broken down by industry whatsoever. In these cases, regional FDI is used to distribute total US FDI into 2- and 3-digit NAICS industries. These cases are: Jordan (total Middle East US Direct Investment Abroad is used); United Arab Emirates/Bahrain/Oman/Morocco (UAE-US DIA; and all 'other' Middle Eastern countries outside Saudi Arabia and Israel).

Data on related-party imports are taken from the US Census Bureau "NAICS Related-Party" page at <http://sasweb.ssd.census.gov/relatedparty/>. Data from 2007 is employed, as elsewhere.

For the decomposition of trade into inter-industry, vertical and horizontal components, I have used the decomposition approach from Fontagné and Freudenberg (1997), using the BACI data from CEPII Gaulier and Zignago (2010). I followed the decomposition strategy used in Manger (2014), that is, one-way trade occurs where one country's bilateral exports exceeds the other country's by a factor of 10. Then, vertical intra-industry trade occurs where the implied unit value of the goods traded differ by more than 25% between the trade partners. To concord this into the NAICS coding scheme, I use a percentage approach. What percentage of the trade flows between the US and South Korea, for example, in NAICS industry 321111 occur on 6-digit tariff lines characterized by HIIT, VIIT, or inter-industry trade? The mean HIIT across all industries and agreements is .0812 while the mean VIIT is .4395.

Number of associations and association resources

The number of associations per industry is based simply on the database of associations generated for this project. Each association is counted as one per industry, even if it spans multiple industries. The associations budget information is taken from Gale's Associations Unlimited (Hedblad, 2003). Association budgets are available for only 227 of 540 associations examined in this paper.

Number of enterprises

The data on the number of enterprises for the agriculture industries comes from Table 46 of the Census of Agriculture 2007, using the column "Farms". See http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_US/st99_1_046_046.pdf. The number of enterprises for mining and manufacturing are taken from the 2012 Economic Census, in order to avoid concordancing for

these supplemental controls.

Measures of industrial concentration

The measure of 4-firm and 20-firm concentration come from the Economic Census available at factfinder.census.gov. The title of the document is "Concentration Ratios: Share of Industry Statistics for Companies Ranked by Value Added: 2012". 2012 data are again employed to avoid concordancing. For the agricultural industries, an approach was developed using data from "Farms by Concentration of Market Value of Agricultural Products Sold" from the 2007 Agricultural Census available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_US/st99_1_040_040.pdf. This document provides information on the number of farms controlling the top 10, 25, 50 and 75% of sales in each agricultural industry (although some at a level of aggregation higher than 6-digits.) My approach was to assume that each farm within those groups is equally size. So if, 8 farms control 10% of agricultural production of peanuts, than the 4-firm concentration ratio is 5%, for example. Clearly, this number puts a lower bound on the concentration ratio, but is plausible as a first cut. Note that concentration ratios are generally very small in farming.

Appendix B: Models with Alternative Measures

This section consider a series of robustness checks using alternative measures for the main variables. In particular, the Rauch (1999) product differentiation measure is replaced with the elasticity of substitution; the 5-point comparative advantage proxy based on net exports is replaced with a 5-point measure based on revealed comparative advantage.

	Support for agreement					
	All	Kor/Aus	All	Kor/Aus	All	Kor/Aus
<u>Effect of differentiation conditional on net-exports:</u>						
Net-importing × Homogeneous → Mod. differentiated	4.82	4.24	-0.12	5.54	-0.50	8.28*
× Homogeneous → Differentiated	14.81***	23.68**	-0.18	8.59	-0.78	12.93*
Balanced trade × Homogeneous → Mod. differentiated	-2.51	-12.67*	-0.32	-0.43	-0.38	-0.10
× Homogeneous → Differentiated	1.31	-15.89**	-0.49	-0.67	-0.59	-0.15
Net-exporting × Homogeneous → Mod. differentiated	-11.41***	-18.56**	-0.52	-5.95	-0.25	-7.61
× Homogeneous → Differentiated	-13.73***	-43.44***	-0.81	-9.36	-0.39	-12.16
<u>Effect of relative exports conditional on differentiation:</u>						
Homogeneous × Relative exports: Low → High	22.30***	55.98***	-0.79	18.64*	2.23	31.39***
Mod. differen. × Relative exports: Low → High	6.19	33.02**	-1.20	7.10	2.51	15.43**
Differentiated × Relative exports: Low → High	-6.10**	-11.13	-1.38	0.59	2.67	6.15
<u>Other covariates:</u>						
FDI potential	8.95***	0.75	8.52***	-1.35	8.92***	-0.68
Imported inputs	9.47***	9.04**	9.87***	7.41**	10.30***	8.05**
Downstream exports	0.65	0.64	0.68	1.16	0.68	1.16
Sales	9.71***	14.74***	8.71***	12.77***	8.45***	12.63***
Sample size	4836	806	4692	782	4692	782
Proxy for Comp. Adv.		RCA		Net exports		RCA
Proxy for Prod. Diff.		Rauch		Elasticity		Elasticity

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except relative exports, which is 10th percentile to median, and median to 90th percentile. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table B1: Replication of models in Table 3 using alternative proxies for comparative advantage and product differentiation.

Outcome:	KORUS/AUSFTA				All	Kor/Aus	All
	Oppose	Divided	Favor	No pos.	Divided	Both happy	Both happy
Abs. Elasticity: High → Moderate	-0.67	-0.24	1.65	-0.32	0.95	3.99	3.63
Abs. Elasticity: High → Low	-0.97	-0.41	2.39	-0.61	1.46	6.27	5.69
Relative exports: Low → Moderate	-11.72***	-2.63	6.58	8.68**	-12.06***	-4.83	-4.09
Relative exports: Moderate → High	-0.78	-8.86*	19.36**	-9.79**	-4.32	-17.81**	-23.49***
FDI potential	-0.54**	-2.35*	5.10**	-2.26*	-5.73***	3.31*	20.24***
Imported inputs	-0.73	-0.29	-4.61	5.64*	8.29**	11.15**	-7.02**
Downstream exports	0.13	1.31	-0.32	-1.20	1.16	0.43	0.18
Sales	0.18	11.08**	3.64	-15.20***	1.65	7.66**	11.83***
Sample size			782		4692	782	4692
Proxy for Comp. Adv.			RCA		RCA	RCA	RCA
Proxy for Prod. Diff.			Elasticity		Elasticity	Elasticity	Elasticity

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table B2: Replication of models in Table 4 using alternative proxies for comparative advantage and product differentiation.

	Firms take positions only	Associations take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Abs. Elasticity: High → Moderate	3.13*	-3.07	2.95	-3.01*	2.97**
Abs. Elasticity: High → Low	5.13*	-4.87	4.64	-4.46*	4.80**
Relative exports: Low → Moderate	10.50***	0.22	7.13**	-3.57	-9.64***
Relative exports: Moderate → High	-4.50	-0.09	-1.20	-0.88	1.72
FDI potential	-6.45***	-2.67	-3.58	-5.62***	3.03
Imported inputs	6.73**	-7.61***	5.06**	-1.18	-1.84
Downstream exports	1.51*	-0.02	-1.43**	1.02	0.54
Sales	2.71	-17.37***	7.48***	-6.81***	7.50***
Sample size	1800	1800	1463	1463	1463
LRT p-value	.00***	.00***	.00***	.00***	.00***

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table B3: Replication of models in Table 5 using alternative proxies for comparative advantage and product differentiation.

Appendix C: Models with Alternative and Additional Controls

This section considers a series of robustness checks including additional controls. These are: the measures of associational resources (number of establishments which requires dropping some missing observations, and number of associations); and the 4- and 20-firm concentration ratios (which require excluding the mining industries). Finally, the FDI potential variable is replaced with the related-party imports of the United States and supplemented with the measures of horizontal and vertical intra-industry trade.

	Support for agreement	
	All	Kor/Aus
<u>Effect of differentiation conditional on net-exports:</u>		
Net-importing × Homogeneous → Mod. differentiated	0.29	15.03
× Homogeneous → Differentiated	13.97**	36.02**
Balanced trade × Homogeneous → Mod. differentiated	-12.81***	-18.69**
× Homogeneous → Differentiated	-3.91	-12.64
Net-exporting × Homogeneous → Mod. differentiated	-29.52***	-29.94***
× Homogeneous → Differentiated	-26.16***	-38.54***
<u>Effect of relative exports conditional on differentiation:</u>		
Homogeneous × Relative exports: Low → High	38.34***	62.82***
Mod. differen. × Relative exports: Low → High	8.55**	16.98
Differentiated × Relative exports: Low → High	-1.79	-12.06
<u>Other covariates:</u>		
Related-party Imports	11.85***	2.85*
Imported inputs	11.75***	7.42**
Downstream exports	0.05	-0.42
Sales	4.17**	12.18**
Assoc. budgets	21.47***	19.82***
Num. assocs.	-1.75	-13.18*
Num. establishments	0.93***	1.92**
4-firm concentration	0.59	-3.21
20-firm concentration	4.27	2.06
Pct. HIIT	4.80***	-16.13***
Pct. VIIT	5.21***	-5.68*
Sample size	4512	752

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except relative exports, which is 10th percentile to median, and median to 90th percentile. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table C1: Replication of Table 3 with additional control variables.

Outcome:	KORUS/AUSFTA				All	Kor/Aus	All
	Oppose	Divided	Favor	No pos.	Divided	Both happy	Both happy
Homogeneous → Mod. differentiated	-2.34	3.07	-14.54*	14.30**	2.23	12.48	12.43
Homogeneous → Differentiated	-3.17*	12.32**	-13.58*	5.06	8.80**	27.57**	25.81**
Relative costs: Low → Moderate	-4.15***	-22.66***	26.98***	0.79	-17.51***	-3.82	-2.69
Relative costs: Moderate → High	-0.81**	-4.39	5.18*	0.18	3.65	-15.12***	-22.35***
Related-party Imports	-0.40**	-3.50**	4.74**	-0.69	-3.71**	3.39	19.34***
Imported inputs	0.27	-0.15	-5.29	4.84*	9.16**	9.42*	-9.61**
Downstream exports	0.02	0.78	-0.91	0.01	0.50	0.23	0.44
Sales	-0.53	9.82*	-0.20	-9.07***	-1.23	15.76**	20.80***
Assoc. budgets	0.50	26.34***	-16.26***	-10.54***	27.21***	11.77**	11.59***
Num. assocs.	1.14	1.02	-7.66	3.69	1.61	-23.66***	-21.07***
Num. establishments	-0.25***	1.07	-0.12	-0.71**	-0.39	2.91***	1.31*
4-firm concentration	-0.91	-12.22***	4.16	9.25*	-8.36***	-17.32*	-16.89**
20-firm concentration	0.91	16.05	-12.45	-6.20**	13.86**	5.55	3.64
Pct. HIIT	0.89	-10.21**	-1.26	10.22**	-3.89*	-10.96	3.96
Pct. VIIT	0.52	8.82**	-13.50***	3.70*	4.49*	-0.73	5.04
Sample size			752		4512	752	4512

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table C2: Replication of models in Table 4 with additional control variables.

	Firms take positions only	Associations take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Homogeneous → Mod. differentiated	1.09	-8.48	-4.70	3.46	9.46**
Homogeneous → Differentiated	15.31***	-28.58***	4.03	0.67	13.92***
Relative costs: Low → Moderate	9.37***	1.93	9.99**	-2.86*	-12.83***
Relative costs: Moderate → High	-1.89	-3.24	-4.19	2.72	4.77
Related-party Imports	-6.95***	-1.79	-3.19	-0.04	0.55**
Imported inputs	3.78	-0.10	2.74	0.11	-4.38**
Downstream exports	3.63***	-2.58***	-0.04	-0.23	1.48*
Sales	7.97**	-21.27***	12.65***	-4.24***	9.70***
Assoc. budgets	-10.68***	6.27***	-17.22***	6.24***	4.67**
Num. assoc.	-4.49	12.53**	4.10	0.26	-1.30
Num. establishments	-1.07***	0.67*	-0.06	0.04	0.49
4-firm concentration	-4.39	9.32*	-2.57	6.05**	-12.29***
20-firm concentration	0.94	-4.21	14.17**	-3.56***	18.31***
Pct. HIIT	-1.36	-1.67	-1.87	1.02	1.69
Pct. VIIT	0.79	-3.96**	2.28	0.73	1.82
Sample size	1774	1774	1435	1435	1438

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table C3: Replication of models in Table 5 using alternative covariates.

Appendix D: Models among Manufacturing Industries Only

	Support for agreement	
	All	Kor/ Aus
<u>Effect of differentiation conditional on net-exports:</u>		
Net-importing × Homogeneous → Mod. differentiated	6.79	23.83
× Homogeneous → Differentiated	15.74**	32.92*
Balanced trade × Homogeneous → Mod. differentiated	2.73	3.89
× Homogeneous → Differentiated	8.66**	1.64
Net-exporting × Homogeneous → Mod. differentiated	-1.62	-15.36
× Homogeneous → Differentiated	1.37	-29.11
<u>Effect of relative exports conditional on differentiation:</u>		
Homogeneous × Relative exports: Low → High	6.47	38.56
Mod. differen. × Relative exports: Low → High	-1.99	-0.16
Differentiated × Relative exports: Low → High	-7.89**	-22.69**
<u>Other covariates:</u>		
FDI potential	14.80***	4.21**
Imported inputs	6.41***	4.14
Downstream exports	0.35	0.50
Sales	10.27***	17.02***
Sample size	4104	684
LRT p-value	.00***	.00***

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except relative exports, which is 10th percentile to median, and median to 90th percentile. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table D1: Replication of Table 3 using manufacturing industries only.

Outcome:	KORUS/AUSFTA				All	Kor/Aus	All
	Oppose	Divided	Favor	No pos.	Divided	Both happy	Both happy
Homogeneous → Mod. differentiated	-2.76**	3.86**	2.09	-2.07	3.21**	12.74	13.45
Homogeneous → Differentiated	-4.08**	10.72*	0.32	-5.42	8.34**	16.88	19.25*
Imp-competing → Balanced trade	-1.77**	-19.19***	17.59**	3.98	-19.25***	-7.66	-2.25
Balanced trade → Export-competing	-0.74*	-5.70*	3.12	3.24	2.05	-12.14***	-24.79***
FDI potential	-0.48***	-2.50*	6.98***	-3.95***	-4.96**	2.61	15.44***
Imported inputs	0.43	-4.15	-4.20	7.81**	6.44*	6.59	-8.43**
Downstream exports	-0.03	1.83*	-1.11	-0.79	1.92*	1.28	1.81
Sales	-0.38	11.64**	2.66	-13.94***	-0.34	13.62**	16.46***
Sample size		684			4104	684	4104

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table D2: Replication of Table 4 using manufacturing industries only.

	Firms take positions only	Assocs. take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Homogeneous → Mod. differentiated	-8.98**	18.59**	-5.94	13.32***	11.42***
Homogeneous → Differentiated	13.72**	-5.28	7.17	8.22**	13.35***
Imp-competing → Balanced trade	12.14***	1.19	8.72**	-3.52	-10.81***
Balanced trade → Export-competing	1.69	-5.70	-4.95	-1.84	2.64
FDI potential	-8.87***	-2.77	-2.93	-0.96	0.41**
Imported inputs	7.93**	-1.74	3.57	-0.11	-3.93**
Downstream exports	4.51***	-2.60***	-1.44*	-0.03	1.77**
Sales	1.48	-17.12***	9.56***	-6.48***	10.95***
Sample size	1609	1609	1443	1403	1443

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table D3: Replication of Table 5 using manufacturing industries only.

	Firms take positions only	Assocs. take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Homogeneous → Mod. differentiated	6.30***	-14.32***	5.99***	1.52	4.32***
Homogeneous → Differentiated	25.18***	-30.76***	13.26***	3.27	10.55***
Imp-competing → Balanced trade	11.89***	1.39	7.83**	-3.36	-10.13***
Balanced trade → Export-competing	1.29	-5.68	-4.22	-2.44	2.25
FDI potential	-9.03***	-2.64	-3.23	-1.14	0.37*
Imported inputs	8.33**	-2.07	3.65	-0.10	-3.96***
Downstream exports	4.25***	-2.34**	-1.47*	0.04	1.97**
Sales	1.69	-16.83***	9.41***	-6.77***	10.87***
Sample size	1616	1616	1446	1446	1446

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table D4: Replication of Table 5 using manufacturing industries only. The Rauch (1999) measure of product differentiation is operationalized as an ordinal rather than a factor variable for this set of robustness checks owing to the limited number of 'Homogeneous' good industries among manufacturers only.

Appendix E: Additional Subset Analyses

This section considers two alternative subset analyses. The first excludes the two extensions of PNTR and the Free Trade Agreement of the Americas, which never secured final passage. The second subset includes only 6 select PTAs with countries of sufficient economic size and heterogeneity: Australia, CAFTA-DR, Chile, Colombia/Panama, Peru, and South Korea. We investigate whether the results are, in the main, similar in these groups and so are not being driven, for example, by non-FTAs or idiosyncratic FTAs that were not driven primarily by diplomatic or strategic considerations. The results look very similar to those presented in the main text.

	Support for agreement	
	FTAs in force	Select 6 FTAs
<u>Effect of differentiation conditional on net-exports:</u>		
Net-importing × Homogeneous → Mod. differentiated	10.38**	11.83*
× Homogeneous → Differentiated	13.38**	16.66**
Balanced trade × Homogeneous → Mod. differentiated	-6.68**	-7.87**
× Homogeneous → Differentiated	-4.82	-7.23*
Net-exporting × Homogeneous → Mod. differentiated	-25.95***	-27.81***
× Homogeneous → Differentiated	-25.09***	-30.94***
<u>Effect of relative exports conditional on differentiation:</u>		
Homogeneous × Relative exports: Low → High	29.59***	35.65***
Mod. differen. × Relative exports: Low → High	-6.69	-3.81
Differentiated × Relative exports: Low → High	-8.76***	-11.78***
<u>Other covariates:</u>		
FDI potential	14.10***	12.58***
US input reliance	14.00***	5.09**
US output reliance	0.97*	1.32**
Sales	4.69***	11.04***
Sample size	3627	2418

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except relative exports, which is 10th percentile to median, and median to 90th percentile. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table E1: Replication of Table 5 excluding Russia and China PNTR, and the Free Trade Agreement of the Americas; and then additionally excluding the FTAs with Middle Eastern states and Singapore.

Outcome:	Select 6 FTAs				In force	Select 6	In force
	Oppose	Divided	Favor	No pos.	Divided	Both happy	Both happy
Homogeneous → Mod. differentiated	-2.25	8.32**	-12.50**	6.77*	7.66**	3.88	2.48
Homogeneous → Differentiated	-3.46*	14.53**	-14.63***	3.96	11.30**	9.83**	4.73
Import-competing → Balanced trade	-4.45**	-20.81***	17.28***	8.67**	-18.00***	-6.81*	-5.95*
Balanced trade → Export-competing	-1.70	3.64	-1.97	-0.12	3.90	-13.97***	-9.15***
FDI potential	1.16	-3.97	10.84***	-8.04***	-3.37	24.00***	21.85***
US input reliance	-0.53	-4.60	2.28	3.16	-0.06	8.36**	8.03***
US output reliance	0.20	3.97**	-1.90*	-2.38***	3.53**	1.42	1.13
Sales	-0.85	14.43***	-0.37	-13.34***	10.07**	5.22**	4.97**
Sample size	2418				3627	2418	3627

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table E2: Replication of Table 5 excluding Russia and China PNTR, and the Free Trade Agreement of the Americas; and then additionally excluding the FTAs with Middle Eastern states and Singapore.

	Firms take positions only	Assocs. take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Homogeneous → Mod. differentiated	-6.32**	-6.62	-2.22	0.30	10.77***
Homogeneous → Differentiated	18.39***	-34.34***	12.07**	-8.63***	14.29***
Import-competing → Balanced trade	17.99***	-2.27	9.26**	-4.90**	-10.59***
Balanced trade → Export-competing	-7.39	2.27	-5.73	0.90	3.14
FDI potential	-8.21***	-6.96***	-3.32	-3.76***	4.27*
US input reliance	3.70	-11.24***	5.64**	-2.81***	-3.47**
US output reliance	3.71**	-2.49***	-1.44*	-0.04	1.82**
Sales	6.64**	-11.97***	8.31***	-2.58***	9.94***
Sample size	1352	1352	1447	1447	1447

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table E3: Replication of Table 5 excluding Russia and China PNTR, and the Free Trade Agreement of the Americas.

	Firms take positions only	Assocs. take positions only	Firms lobby only	Association(s) lobby only	Both lobby
Homogeneous → Mod. differentiated	-3.11	-6.69	-2.32	-0.33	10.86***
Homogeneous → Differentiated	20.69***	-35.71***	12.50**	-11.81***	14.79***
Import-competing → Balanced trade	16.86***	-0.91	8.10**	-1.29	-12.19***
Balanced trade → Export-competing	-4.21	1.33	-5.51	-0.36	3.57
FDI potential	-12.30***	-4.35*	-3.58	-2.72***	4.14*
US input reliance	4.07	-8.05***	4.14	-0.24	-4.44***
US output reliance	3.48**	-2.51**	-1.44*	0.00	1.83**
Sales	2.30	-11.51***	8.58***	-2.85***	10.36***
Sample size	1122	1122	1405	1405	1405

Notes: All estimates are first differences from logistic regression models; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table E4: Replication of Table 5 excluding Russia and China PNTR, and the Free Trade Agreement of the Americas; and then additionally excluding the FTAs with Middle Eastern states and Singapore.

Appendix F: Random Intercept Models

	All			KORUS/AUSFTA		
(Intercept)	-9.93*** (0.71)	-9.96*** (0.90)	-5.42*** (1.06)	-14.54*** (1.95)	-13.50*** (2.31)	-13.26*** (3.31)
diffMod. differentiated	0.86*** (0.27)	1.30*** (0.31)	1.26*** (0.35)	1.26* (0.69)	1.08 (0.79)	1.79* (1.05)
diffDifferentiated	1.35*** (0.26)	1.65*** (0.30)	2.19*** (0.35)	1.92*** (0.66)	1.42* (0.77)	2.56** (1.08)
ca	0.33*** (0.06)	0.35*** (0.07)	0.34*** (0.08)	0.70*** (0.17)	0.59*** (0.19)	0.54** (0.28)
log(fdi1)	0.07*** (0.01)	-0.00 (0.02)	-0.05** (0.02)	-0.02 (0.04)	-0.16*** (0.05)	-0.52*** (0.08)
log(totusinpfor + 1)	0.09*** (0.02)	0.16*** (0.02)	0.23*** (0.02)	0.12** (0.06)	0.18** (0.07)	0.18* (0.10)
log(totusoutfor + 1)	0.01 (0.01)	0.03*** (0.01)	0.03** (0.01)	0.01 (0.02)	0.05** (0.02)	0.04 (0.03)
log(sales)	0.29*** (0.03)	0.23*** (0.04)	-0.02 (0.05)	0.49*** (0.10)	0.42*** (0.12)	0.45*** (0.17)
diffMod. differentiated:ca	-0.32*** (0.08)	-0.40*** (0.08)	-0.35*** (0.09)	-0.57*** (0.20)	-0.49** (0.22)	-0.52* (0.31)
diffDifferentiated:ca	-0.43*** (0.07)	-0.53*** (0.08)	-0.56*** (0.09)	-0.84*** (0.20)	-0.73*** (0.22)	-0.71** (0.32)
Random intercepts	None	3-digit	4-digit	None	3-digit	4-digit
Sample size		4836			806	

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table F1: Replication of models in Table 3 with random intercepts at the 3- and 4-digit NAICS levels.

	All			KORUS/AUSFTA		
(Intercept)	-7.88*** (2.53)	-11.83*** (3.06)	-6.95* (4.09)	-20.25*** (3.68)	-20.28*** (4.08)	-19.37*** (6.19)
diffMod. differentiated	1.25* (0.65)	1.61** (0.72)	2.42* (1.39)	1.85** (0.88)	1.94** (0.94)	2.84 (1.77)
diffDifferentiated	1.62** (0.64)	1.53** (0.76)	2.08 (1.40)	2.36*** (0.90)	2.11** (0.98)	2.07 (1.84)
ca	-1.41*** (0.40)	-1.36*** (0.44)	-1.38*** (0.52)	-0.98** (0.49)	-1.05* (0.55)	-0.51 (0.85)
I(ca ²)	0.20*** (0.07)	0.18** (0.08)	0.19** (0.09)	0.12 (0.09)	0.12 (0.10)	0.03 (0.16)
log(fdi1)	-0.13** (0.05)	-0.10 (0.07)	-0.18** (0.08)	-0.12* (0.06)	-0.09 (0.10)	-0.24 (0.17)
log(totusinpfor + 1)	0.12* (0.07)	0.15* (0.08)	0.26*** (0.10)	-0.16 (0.15)	-0.29 (0.19)	0.20 (0.30)
log(totusoutfor + 1)	0.06** (0.03)	0.05* (0.03)	0.05 (0.04)	0.06* (0.03)	0.06* (0.04)	0.07 (0.06)
log(sales)	0.19 (0.12)	0.32** (0.14)	-0.02 (0.19)	0.76*** (0.20)	0.83*** (0.24)	0.32 (0.36)
country2Other	-3.07*** (0.23)	-3.56*** (0.27)	-4.07*** (0.32)			
countryKorea				2.73*** (0.55)	3.14*** (0.64)	4.08*** (1.01)
Random intercepts	None	3-digit	4-digit	None	3-digit	4-digit
Sample size		4836			806	

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table F2: Replication of some of the models in Table 4 with random intercepts at the 3- and 4-digit NAICS levels. This table uses all logistic regression models, with 'Divisions' as the outcome variable.

	All			KORUS/AUSFTA		
(Intercept)	-12.81*** (1.73)	-13.15*** (2.14)	-11.92*** (2.47)	-14.04*** (2.22)	-12.54*** (2.61)	-12.05*** (3.46)
diffMod. differentiated	0.35 (0.35)	0.50 (0.44)	0.47 (0.59)	0.36 (0.42)	0.31 (0.48)	0.16 (0.69)
diffDifferentiated	0.75** (0.33)	0.30 (0.46)	0.77 (0.59)	0.62 (0.41)	0.22 (0.50)	0.26 (0.72)
ca	0.38 (0.29)	0.57* (0.32)	0.87** (0.36)	0.29 (0.36)	0.19 (0.40)	0.62 (0.54)
I(ca ²)	-0.11** (0.05)	-0.14** (0.06)	-0.19*** (0.06)	-0.11 (0.07)	-0.10 (0.07)	-0.19* (0.10)
log(fdi1)	0.17*** (0.03)	0.24*** (0.04)	0.26*** (0.05)	0.09** (0.04)	0.08 (0.06)	0.09 (0.10)
log(totusinpfor + 1)	-0.11*** (0.04)	-0.19*** (0.05)	-0.20*** (0.05)	0.19** (0.08)	0.14 (0.10)	0.32** (0.14)
log(totusoutfor + 1)	0.02 (0.02)	0.03 (0.02)	0.02 (0.03)	0.02 (0.02)	0.05** (0.02)	0.04 (0.03)
log(sales)	0.55*** (0.08)	0.61*** (0.10)	0.53*** (0.11)	0.37*** (0.12)	0.33** (0.14)	0.13 (0.20)
country2Other	-3.41*** (0.17)	-3.89*** (0.19)	-4.55*** (0.24)			
countryKorea				0.96*** (0.23)	1.19*** (0.28)	1.64*** (0.38)
Random intercepts	None	3-digit	4-digit	None	3-digit	4-digit
Sample size		4836			806	

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table F3: Replication of some of the models in Table 4 with random intercepts at the 3- and 4-digit NAICS levels. This table uses all logistic regression models, with 'Both happy' as the outcome variable.

Outcome:	Firm positions only			Association positions only		
(Intercept)	-8.85*** (1.45)	-1.05 (2.01)	-4.30* (2.55)	15.30*** (1.19)	9.56*** (1.55)	7.31*** (1.83)
diffMod. differentiated	-0.57 (0.36)	-0.00 (0.60)	0.51 (0.69)	-0.43* (0.22)	-0.10 (0.31)	-0.11 (0.37)
diffDifferentiated	1.45*** (0.30)	1.76*** (0.60)	2.15*** (0.74)	-1.53*** (0.22)	-0.44 (0.32)	-0.63 (0.40)
ca	0.64** (0.25)	0.73*** (0.28)	0.78** (0.33)	0.03 (0.19)	0.26 (0.21)	0.07 (0.24)
I(ca ²)	-0.09** (0.04)	-0.11** (0.05)	-0.12** (0.06)	0.00 (0.03)	-0.03 (0.04)	-0.00 (0.04)
log(fdi1)	-0.12*** (0.03)	-0.16*** (0.04)	-0.12*** (0.04)	-0.04 (0.02)	0.02 (0.03)	0.10*** (0.04)
log(totusinfor + 1)	0.08* (0.04)	0.05 (0.05)	-0.03 (0.06)	-0.02 (0.03)	-0.01 (0.04)	-0.13*** (0.04)
log(totusoutfor + 1)	0.06*** (0.02)	0.05** (0.02)	-0.01 (0.03)	-0.03** (0.01)	-0.04*** (0.01)	-0.03 (0.02)
log(sales)	0.15** (0.07)	-0.19** (0.09)	0.01 (0.11)	-0.58*** (0.06)	-0.37*** (0.07)	-0.20** (0.09)
Random intercepts	None	3-digit	4-digit	None	3-digit	4-digit
Sample size	1845					

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table F4: Replication of some of the models in Table 5 with random intercepts at the 3- and 4-digit NAICS levels.

Outcome:	Firms lobby only			Associations lobby only			Firms and assoc. lobby		
(Intercept)	-9.28*** (1.34)	-0.72 (1.70)	-4.08** (1.97)	10.14*** (1.61)	3.42 (2.34)	-1.14 (2.80)	-10.60*** (1.57)	-12.62*** (1.91)	-8.37*** (2.16)
diffMod. differentiated	-0.14 (0.27)	-1.06*** (0.37)	-0.58 (0.41)	0.03 (0.25)	0.70* (0.36)	-0.16 (0.64)	1.51*** (0.37)	0.64 (0.44)	0.75 (0.47)
diffDifferentiated	0.63*** (0.24)	-0.54 (0.37)	0.31 (0.41)	-0.77*** (0.24)	0.05 (0.42)	-1.58** (0.70)	1.79*** (0.36)	0.90** (0.45)	1.05** (0.49)
ca	0.59** (0.24)	0.40 (0.26)	0.24 (0.29)	-0.54** (0.27)	-0.19 (0.33)	-0.18 (0.39)	-0.68*** (0.26)	-0.53* (0.28)	-0.39 (0.30)
I(ca ²)	-0.09** (0.04)	-0.07* (0.04)	-0.04 (0.05)	0.08* (0.04)	0.03 (0.05)	0.03 (0.06)	0.10** (0.04)	0.08* (0.05)	0.06 (0.05)
log(fdi1)	-0.03 (0.03)	-0.14*** (0.03)	-0.15*** (0.04)	-0.13*** (0.04)	-0.01 (0.05)	0.06 (0.05)	0.07** (0.03)	0.04 (0.04)	0.03 (0.04)
log(totusinpfor + 1)	0.06 (0.04)	0.09* (0.05)	0.10* (0.05)	0.01 (0.05)	0.04 (0.05)	0.02 (0.06)	-0.12*** (0.04)	-0.05 (0.05)	-0.04 (0.05)
log(totusoutfor + 1)	-0.02* (0.01)	-0.02 (0.01)	-0.04** (0.02)	0.01 (0.02)	-0.04* (0.02)	-0.10*** (0.04)	0.04** (0.02)	0.04** (0.02)	0.05* (0.03)
log(sales)	0.28*** (0.07)	-0.08 (0.08)	0.04 (0.10)	-0.46*** (0.08)	-0.27** (0.11)	-0.00 (0.13)	0.42*** (0.07)	0.45*** (0.09)	0.23** (0.10)
Random intercepts	None	3-digit	4-digit	None	3-digit	4-digit	None	3-digit	4-digit
Sample size					1499				

Notes: All estimates are first differences from a multinomial logistic regression; changes in continuous variables are from median to 90th percentile except for the comparative advantage proxy, which is 10th percentile to median. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table F5: Replication of some of the models in Table 5 with random intercepts at the 3- and 4-digit NAICS levels.

References

- Broda, Christian and David Weinstein. 2006. Globalization and the Gains from Variety. *The Quarterly Journal of Economics* 121, no. 2: 541–585.
- Fontagné, Lionel and Michael Freudenberg. 1997. *Intra-Industry Trade: Methodological Issues Reconsidered*, volume 97. Paris: CEPII.
- Gaulier, Guillaume and Soledad Zignago. 2010. BACI: International Trade Database at the Product-level.
- Hedblad, Alan. 2003. *Encyclopedia of Associations: An Associations Unlimited Reference*, volume 1. Gale Research Company.
- Manger, Mark. 2014. The Economic Logic of Asian preferential Trade Agreements: The Role of Intra-industry Trade. *Journal of East Asian Studies* 14, no. 2: 151–184.
- Rauch, James. 1999. Networks Versus Markets in International Trade. *Journal of International Economics* 48, no. 1: 7–35.