

Quantifying U.S. GATT Trade Liberalization

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Overview

Large-scale tariff reductions under GATT 1947-1994

- ▶ 8 rounds of negotiations
- ▶ Negotiated tariff bindings (vs. applied tariffs)

Largely theoretical literature because no systematic data on either applied or negotiated tariffs (Bown and Irwin 2017)

- ▶ Therefore LOTS of open research questions
 - ▶ One exception: Bagwell, Staiger and Yurukoglu (2020)

Today: describe the tariff schedule data, its sources, our methods for digitizing it, preliminary findings for first five rounds for U.S.

Pre-GATT

We take advantage of a large qualitative literature on historical trade policy (e.g., Irwin 2017)

- ▶ contextualize and interpret the data, find new data sources

For the United States:

- ▶ 1930: Smoot-Hawley Act: massive upward revision of tariffs
- ▶ 1934: Backlash from Smoot-Hawley \Rightarrow Reciprocal Trade Agreements Act (RTAA)
 - ▶ President could reduce tariffs up to 50% without Congress
 - ▶ U.S. made about two dozen trade agreements by 1946
- ▶ 1945: Truman granted authority for 50% reductions from 1945 rates

GATT era

1947, **Geneva**: bilateral negotiations \Rightarrow MFN

1949, **Annecy**: only negotiate with newcomers

1951, **Torquay**: no peril points

1956, **Geneva 1956**: 15% reduction allowed, 3 phases

1962, **Dillon**: 20% reduction allowed, 2 phases

► **Kennedy** begins, 50% reductions authorized

1963: New nomenclature (TSUS) takes effect

GATT era

1967, **Kennedy**: first reductions by formula, 5 phases

1973: **Tokyo** begins, no negotiating authority for Nixon

- ▶ 1974: granted 60% reductions, Fast Track (now TPA)
- ▶ 1979: **Tokyo** concluded, reductions again by formula

1986: **Uruguay** starts, no negotiating authority for Reagan

- ▶ 1988: HS replaces TSUS, Reagan gets authority for 50% reductions
- ▶ 1993: **Uruguay** concluded

Data sources

- ▶ GATT schedules available in PDF format in the United National Treaty Collection (UNTC)
- ▶ Tariff Act of 1930 (Smoot Hawley) from Congressional records
- ▶ *United States Import Duties, 1946*, USITC via HathiTrust Digital Library
- ▶ *Tariff Classification Study, Vol. 9*, United States Tariff Commission
- ▶ *Tariff Schedules of the United States (TSUS)*, United States Tariff Commission

So far...

To date, we've digitized and standardized the tariff schedules for the United States from 1930 to 1964, including 1946

- ▶ We expand the Smoot-Hawley nomenclature with new 'items' as sub-divisions are added through time
- ▶ About 15% of items are "compound" (Teti 2020), i.e. have both *ad valorem* and specific components
- ▶ Roughly 10% of items are "mixed", i.e. have either an *ad valorem* or specific rate, depending on which is higher
- ▶ About 2% of the items are "technical", e.g. defined on proportion of content that meets some criteria

All are included in the statistics below for specific and *ad valorem*

Still to be done

- ▶ Concordances
 - ▶ Smoot-Hawley to TSUS
 - ▶ TSUS to HS
 - ▶ Smoot-Hawley to 1930's import classification system
- ▶ Add final three GATT rounds
 - ▶ Integrate “Free Lists” (Schedule 16, ~200 items by Torquay)
- ▶ Import volume and value data
 - ▶ *Ad valorem* equivalents
 - ▶ Trade weighting
 - ▶ Terms-of-trade analysis
- ▶ Other countries' schedules

That means. . .

No trade weighting

No *ad valorem* equivalents

We analyze specific and *ad valorem* separately

We have to deal with units for specific tariffs

- ▶ Put everything in cents (¢)
- ▶ Translate tariffs to align with a few units (¢/ounce, ¢/sq. foot, ¢/each, ¢/board foot, ¢/cubic foot)

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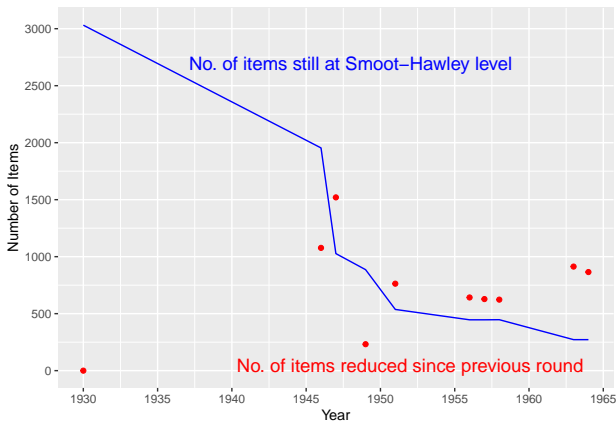
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Drumroll, please. . .

Item level



Surprise! 78 tariff increases. Scattered across industries.

Liberalization from 1930 to 1964

From the Smoot-Hawley tariffs (1930) to the Dillon Round (1964) both *ad valorem* and specific tariffs were cut roughly in half

- ▶ mean *ad valorem* tariff binding decreases from 39% to 18.9%
 - ▶ medians drop from 35% to 15%
- ▶ mean specific tariff binding decreases from 14¢ to 7¢
 - ▶ medians are much smaller, dropping from 0.38¢ to 0.21¢

Perhaps surprising: contribution of bilateral negotiations (\Rightarrow MFN) before 1946 was about half of total from 1930 to Geneva

Decrease in Specific Tariffs by Round

	Mean	% decrease	Median	% decrease
Smoot Hawley	14.5	0.0	0.4	0.0
1946	11.6	20.0	0.4	0.0
Geneva	9.1	21.1	0.3	16.7
Annecy	9.0	1.7	0.3	10.0
Torquay	8.1	10.1	0.2	14.9
GenevaA	8.0	1.3	0.2	2.0
GenevaB	7.8	1.3	0.2	4.0
GenevaC	7.8	1.2	0.2	2.8
DillonA	7.3	5.4	0.2	0.0
DillonB	7.1	3.8	0.2	2.9

Decrease in Ad Valorem Tariffs by Round

	Mean	% decrease	Median	% decrease
Smoot Hawley	39.0	0.0	35.0	0.0
1946	34.0	12.9	30.0	14.3
Geneva	26.5	22.1	25.0	16.7
Annecy	25.6	3.4	20.0	20.0
Torquay	22.1	13.4	18.8	6.2
GenevaA	21.6	2.3	17.5	6.7
GenevaB	21.4	1.2	17.5	0.0
GenevaC	21.1	1.0	17.5	0.0
DillonA	19.5	8.0	15.5	11.4
DillonB	18.9	3.0	15.0	3.2

Table 3

Table 1: Summary Statistics for Specific Tariffs by Round

	Min	1st Quartile	Mean	Median	3rd Quartile	Max	N
Smoot Hawley	0	0.12	14.45	0.38	2.50	3000	1554
1946	0	0.10	11.56	0.38	2.31	1500	1541
Geneva	0	0.07	9.12	0.31	1.88	1000	1543
Annecy	0	0.07	8.96	0.28	1.75	1000	1542
Torquay	0	0.06	8.06	0.24	1.56	750	1542
GenevaA	0	0.06	7.95	0.23	1.56	750	1542
GenevaB	0	0.06	7.85	0.22	1.56	750	1542
GenevaC	0	0.06	7.75	0.22	1.56	750	1539
DillonA	0	0.06	7.33	0.22	1.56	650	1541
DillonB	0	0.06	7.05	0.21	1.50	550	1541

The count of specific tariffs per round is stable.

- Only 98 lines transition type at any point. 37 specific \Rightarrow *ad valorem*, 24 *ad valorem* \Rightarrow specific

Table 4

Table 2: Summary Statistics of Ad Valorem Tariffs by Round

	Min	1st Quartile	Mean	Median	3rd Quartile	Max	N
Smoot Hawley	5.00	25.0	38.97	35.00	50.00	105	1982
1946	2.50	20.0	33.95	30.00	45.00	105	1988
Geneva	2.50	15.0	26.46	25.00	35.00	105	1972
Annecy	2.50	12.5	25.56	20.00	33.33	105	1972
Torquay	1.88	12.5	22.14	18.75	27.50	90	1970
GenevaA	1.88	11.5	21.63	17.50	27.50	90	1970
GenevaB	1.88	11.0	21.36	17.50	27.00	90	1970
GenevaC	1.88	10.5	21.14	17.50	25.50	90	1971
DillonA	1.00	10.5	19.46	15.50	25.00	90	1965
DillonB	0.50	10.0	18.88	15.00	25.00	90	1965

Schedule Titles

Schedule Titles			
Schedule	Items	Abbreviation	Title
1	399	Chemicals	Chemicals, Oil, and Paints
2	247	Glass	Earths, Earthenware, and Glassware
3	660	Metals	Metals and Manufactures of
4	53	Wood	Wood and Manufactures of
5	17	Sugar	Sugar, Molasses, and Manufactures of
6	12	Tobacco	Tobacco and Manufactures of
7	471	Ag	Agricultural Products and Provisions
8	34	Spirits	Spirits, Wines, and other Beverages
9	118	Cotton	Cotton Manufactures
10	91	Flax	Flax, Hemp, Jute, and Manufactures of
11	161	Wool	Wool and Manufactures of
12	38	Silk	Silk Manufactures
13	48	Rayon	Manufactures of Rayon or Other Synthetic Textile
14	144	Paper	Papers and Books
15	538	Sundries	Sundries

Table 6

Table 3: Reduction in Specific Tariffs by Schedule

Sched	Mean Comparisons			Median Comparisons			Observations	
	SH_mean	DB_mean	mean_chg	SH_med	DB_med	med_chg	n_specific	n
1	1.18	0.68	42.23	0.25	0.13	46.88	264	396
2	6.07	2.67	56.05	0.25	0.15	40.00	101	232
3	49.69	18.86	62.04	0.31	0.16	50.00	288	620
4	0.46	0.21	54.61	0.49	0.17	64.29	6	53
5	0.15	0.06	62.44	0.11	0.03	75.00	11	17
6	9.22	3.89	57.84	3.28	1.47	55.24	12	12
7	11.87	3.50	70.49	0.19	0.09	50.00	355	470
8	2.07	0.62	70.19	0.98	0.33	66.40	33	34
9	0.80	0.46	42.45	0.59	0.36	39.36	8	111
10	0.38	0.24	36.38	0.17	0.12	31.82	42	91
11	3.15	1.96	37.82	2.50	1.94	22.50	138	156
12	NaN	NaN	NaN	NA	NA	NA	0	37
13	2.50	1.45	42.06	2.81	1.56	44.44	34	48
14	0.85	0.49	41.57	0.31	0.12	60.00	84	143
15	13.64	8.25	39.52	1.56	1.00	36.00	116	513

Table 7

Table 4: Reduction in Ad Valorem Tariffs by Schedule

Sched	Mean Comparisons			Median Comparisons			Observations	
	SH_mean	DB_mean	mean_chg	SH_med	DB_med	med_chg	n_av	n
1	29.85	14.11	52.75	25.00	12.50	50.00	204	396
2	44.74	22.94	48.72	45.00	20.50	54.44	152	232
3	37.68	17.48	53.60	35.00	14.00	60.00	451	620
4	33.91	15.09	55.51	33.33	15.00	55.00	47	53
5	50.83	31.92	37.21	50.00	22.50	55.00	6	17
6	25.00	7.75	69.00	25.00	7.75	69.00	2	12
7	31.74	14.25	55.09	35.00	13.50	61.43	119	470
8	60.00	30.00	50.00	60.00	30.00	50.00	1	34
9	36.64	22.26	39.25	37.50	20.00	46.67	105	111
10	37.45	14.86	60.31	40.00	12.50	68.75	58	91
11	49.20	24.93	49.33	50.00	23.75	52.50	110	156
12	57.43	24.38	57.55	60.00	21.00	65.00	37	37
13	52.64	26.47	49.71	57.50	23.25	59.57	36	48
14	21.68	8.69	59.93	20.00	8.00	60.00	123	143
15	44.09	21.54	51.14	40.00	17.00	57.50	460	513

What's next?

- ▶ Concordances
 - ▶ Smoot-Hawley to TSUS
 - ▶ TSUS to HS
 - ▶ Smoot-Hawley to 1930's import classification system
- ▶ Add final three GATT rounds
 - ▶ Integrate "Free Lists" (Schedule 15, ~200 items by Torquay)
- ▶ Import volume and value data
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