

# Quantifying U.S. GATT Trade Liberalization

Kristy Buzard, Syracuse University, kbuzard@syr.edu  
Ross Jestrab, Syracuse University  
Zeyuan (Victor) Xiong, Syracuse University

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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)
  - ▶ FDR could reduce tariffs up to 50% without Congress
  - ▶ U.S. made about two dozen trade agreements by 1946
- ▶ 1945: Truman could reduce tariffs up to 50% 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

1963: New nomenclature (TSUS) takes effect

1988: HS replaces TSUS

## Data sources

GATT schedules available in PDF format in the United Nations 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
- ▶ We integrate "compound" (15%), "mixed" (10%), "technical" (2%) as one of the main categories (Teti 2020)
  - ▶ "compound": both *ad valorem* and specific components
  - ▶ "mixed": either *ad valorem* or specific, whichever is higher
  - ▶ "technical": e.g., proportion of content that meets a criterion

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

## Still to be done

- ▶ Add final three GATT rounds
  - ▶ Integrate “Free Lists” (Schedule 16, ~200 items by Torquay)
- ▶ Concordances
  - ▶ Smoot-Hawley to TSUS
  - ▶ TSUS to HS
  - ▶ Smoot-Hawley to 1930’s import classification system
- ▶ 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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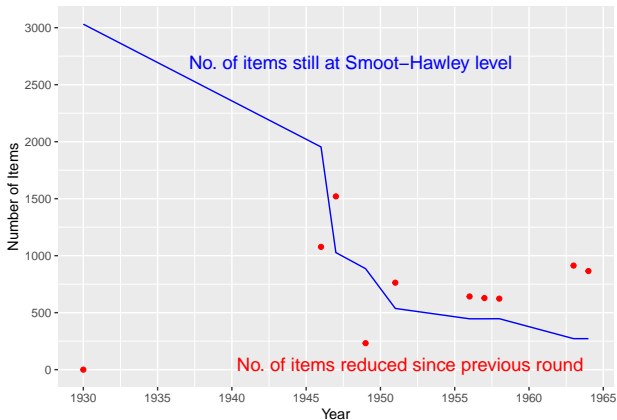
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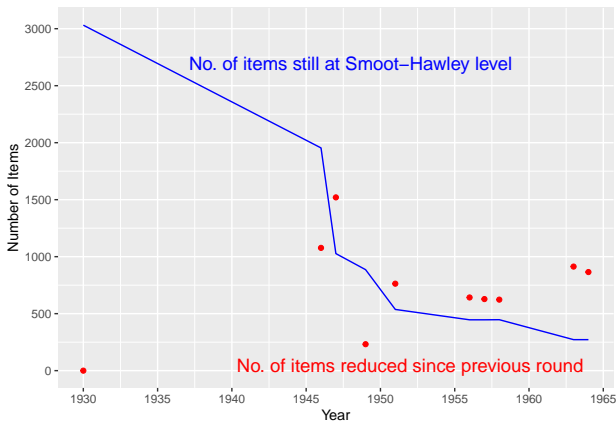
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Drumroll, please. . .

# Item level



# 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¢

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

## Reduction 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

## Reduction 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

# Summary Statistics: Ad Valorem Tariffs

	Min	1st Quartile	Mean	Median	3rd Quartile	Max	N
Smoot Hawley	5.0	25.0	39.0	35.0	50.0	105	1982
1946	2.5	20.0	34.0	30.0	45.0	105	1988
Geneva	2.5	15.0	26.5	25.0	35.0	105	1972
Annecy	2.5	12.5	25.6	20.0	33.3	105	1972
Torquay	1.9	12.5	22.1	18.8	27.5	90	1970
GenevaA	1.9	11.5	21.6	17.5	27.5	90	1970
GenevaB	1.9	11.0	21.4	17.5	27.0	90	1970
GenevaC	1.9	10.5	21.1	17.5	25.5	90	1971
DillonA	1.0	10.5	19.5	15.5	25.0	90	1965
DillonB	0.5	10.0	18.9	15.0	25.0	90	1965



## Summary Statistics: Specific Tariffs

	Min	1st Quartile	Mean	Median	3rd Quartile	Max	N
Smoot Hawley	0	0.1	14.5	0.4	2.5	3000	1554
1946	0	0.1	11.6	0.4	2.3	1500	1541
Geneva	0	0.1	9.1	0.3	1.9	1000	1543
Annecy	0	0.1	9.0	0.3	1.7	1000	1542
Torquay	0	0.1	8.1	0.2	1.6	750	1542
GenevaA	0	0.1	8.0	0.2	1.6	750	1542
GenevaB	0	0.1	7.8	0.2	1.6	750	1542
GenevaC	0	0.1	7.8	0.2	1.6	750	1539
DillonA	0	0.1	7.3	0.2	1.6	650	1541
DillonB	0	0.1	7.1	0.2	1.5	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

# Schedules

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

# Reduction in *Ad Valorem* Tariffs by Schedule

Sched	Abbr	Mean Comparisons			Median Comparisons			No. of Items	
		SH	Dillon	Decrease	SH	Dillon	Decrease	Ad Valorem	Total
1	Chemicals	29.9	14.1	52.7	25.0	12.5	50.0	204	396
2	Glass	44.7	22.9	48.7	45.0	20.5	54.4	152	232
3	Metals	37.7	17.5	53.6	35.0	14.0	60.0	451	620
4	Wood	33.9	15.1	55.5	33.3	15.0	55.0	47	53
5	Sugar	50.8	31.9	37.2	50.0	22.5	55.0	6	17
6	Tobacco	25.0	7.8	69.0	25.0	7.8	69.0	2	12
7	Ag	31.7	14.3	55.1	35.0	13.5	61.4	119	470
8	Spirits	60.0	30.0	50.0	60.0	30.0	50.0	1	34
9	Cotton	36.6	22.3	39.2	37.5	20.0	46.7	105	111
10	Flax	37.4	14.9	60.3	40.0	12.5	68.8	58	91
11	Wool	49.2	24.9	49.3	50.0	23.8	52.5	110	156
12	Silk	57.4	24.4	57.6	60.0	21.0	65.0	37	37
13	Rayon	52.6	26.5	49.7	57.5	23.2	59.6	36	48
14	Paper	21.7	8.7	59.9	20.0	8.0	60.0	123	143
15	Sundries	44.1	21.5	51.1	40.0	17.0	57.5	460	513

# Reduction in Specific Tariffs by Schedule

Sched	Abbr	Mean Comparisons			Median Comparisons			No. of Items	
		SH	Dillon	Decrease	SH	Dillon	Decrease	Specific	Total
1	Chemicals	1.2	0.7	42.2	0.2	0.1	46.9	264	396
2	Glass	6.1	2.7	56.0	0.2	0.1	40.0	101	232
3	Metals	49.7	18.9	62.0	0.3	0.2	50.0	288	620
4	Wood	0.5	0.2	54.6	0.5	0.2	64.3	6	53
5	Sugar	0.2	0.1	62.4	0.1	0.0	75.0	11	17
6	Tobacco	9.2	3.9	57.8	3.3	1.5	55.2	12	12
7	Ag	11.9	3.5	70.5	0.2	0.1	50.0	355	470
8	Spirits	2.1	0.6	70.2	1.0	0.3	66.4	33	34
9	Cotton	0.8	0.5	42.5	0.6	0.4	39.4	8	111
10	Flax	0.4	0.2	36.4	0.2	0.1	31.8	42	91
11	Wool	3.2	2.0	37.8	2.5	1.9	22.5	138	156
12	Silk	NaN	NaN	NaN	NA	NA	NA	0	37
13	Rayon	2.5	1.4	42.1	2.8	1.6	44.4	34	48
14	Paper	0.8	0.5	41.6	0.3	0.1	60.0	84	143
15	Sundries	13.6	8.2	39.5	1.6	1.0	36.0	116	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)
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