

# 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

## 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, peril points (pp)

1951, **Torquay**: no peril points

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

1962, **Dillon**: pp, 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
- ▶ 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, 1964*, 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 15, ~200 items by Torquay)
- ▶ Import volume and value data
  - ▶ *Ad valorem* equivalents
  - ▶ Trade weighting
  - ▶ Terms-of-trade analysis
- ▶ Other countries' schedules



## That means...

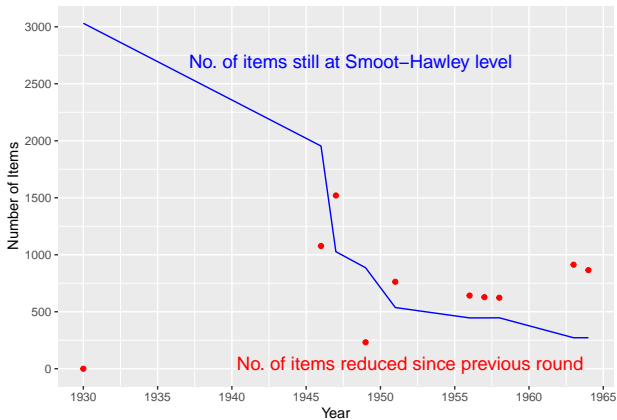
Statistics throughout the paper for specific tariffs are *not* trade weighted; we are in the process of acquiring the trade data required to both trade weight summary statistics and compute *ad valorem* equivalents.

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)

# Item level



## 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¢

# Table 1

Table 1: Decrease in Specific Tariffs by Round

|              | Mean  | % decrease | Median | % decrease |
|--------------|-------|------------|--------|------------|
| Smoot Hawley | 14.45 | 0.00       | 0.38   | 0.00       |
| 1946         | 11.56 | 20.03      | 0.38   | 0.00       |
| Geneva       | 9.12  | 21.10      | 0.31   | 16.67      |
| Annecy       | 8.96  | 1.71       | 0.28   | 10.00      |
| Torquay      | 8.06  | 10.08      | 0.24   | 14.93      |
| GenevaA      | 7.95  | 1.35       | 0.23   | 2.04       |
| GenevaB      | 7.85  | 1.30       | 0.22   | 4.00       |
| GenevaC      | 7.75  | 1.25       | 0.22   | 2.78       |
| DillonA      | 7.33  | 5.42       | 0.22   | 0.00       |
| DillonB      | 7.05  | 3.79       | 0.21   | 2.86       |

## Table 2

Table 2: Decrease in Ad Valorem Tariffs by Round

|              | Mean  | % decrease | Median | % decrease |
|--------------|-------|------------|--------|------------|
| Smoot Hawley | 38.97 | 0.00       | 35.00  | 0.00       |
| 1946         | 33.95 | 12.88      | 30.00  | 14.29      |
| Geneva       | 26.46 | 22.07      | 25.00  | 16.67      |
| Annecy       | 25.56 | 3.40       | 20.00  | 20.00      |
| Torquay      | 22.14 | 13.38      | 18.75  | 6.25       |
| GenevaA      | 21.63 | 2.29       | 17.50  | 6.67       |
| GenevaB      | 21.36 | 1.24       | 17.50  | 0.00       |
| GenevaC      | 21.14 | 1.04       | 17.50  | 0.00       |
| DillonA      | 19.46 | 7.95       | 15.50  | 11.43      |
| DillonB      | 18.88 | 2.95       | 15.00  | 3.23       |

# Table 3

Table 3: 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 |

## Table 4

Table 4: 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 5: 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 |

## Industry-by-industry liberalization

## Table 7

Table 6: 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 |

# Importance of pre-GATT negotiations

## Some lines see tariff increases

Very few changes between *ad valorem* and specific

## What's next?

- ▶ Concordances
  - ▶ Smoot-Hawley to TSUS
  - ▶ TSUS to HS
  - ▶ Smoot-Hawley to 1930's import classification system
- ▶ Add final three GATT rounds
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