

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...

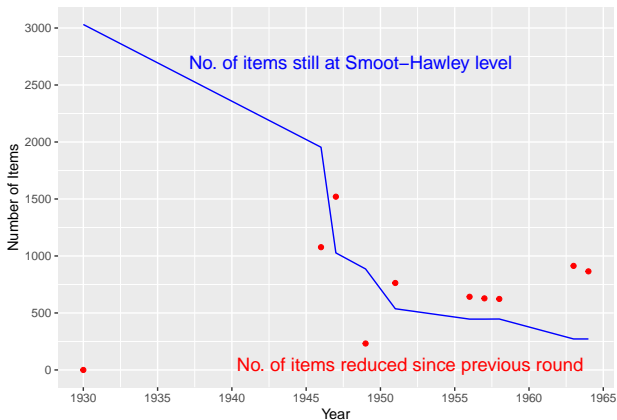
Statistics throughout the paper for specific tariffs are *not* trade weighted; we are in the process of acquiring the trade data required to both trade weight summary statistics and compute *ad valorem* equivalents.

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 (cents/ounce, cents/sq. foot, cents/each, cents/board foot, cents/cutib 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¢

Round-by-Round liberalization

- ▶ Level 2: see if there's some way to combine them into one table (I think this will be hard in terms of just fitting everything in, but worth a try if there's time). If you try it, leave the original two slides and just add a third so I can compare

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 | 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 6: Reduction in Ad Valorem Tariffs by Schedule

| Sched | 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
- ▶ Import volume and value data
 - ▶ *Ad valorem* equivalents
 - ▶ Trade weighting
 - ▶ Terms-of-trade analysis