

ERTA / Income Inequality - Research Findings & Citations

1. Data Sources Used

- Top 1% pre-tax income shares (US + 16 OECD countries): World Inequality Database, built on the Piketty and Saez (2003) methodology
- Top US federal marginal tax rates 1960-2024: Tax Foundation historical brackets
- Marginal rates for 16 other OECD countries: Piketty-WID series (Alvaredo et al. 2018) plus OECD Tax Database Table I.7 (2000-2020) plus Hope and Limberg (2022) for pre-2000 gaps
- Real GDP per capita: FRED series A939RX0Q048SBEA
- Gini coefficient: US Census CPS Historical Income Tables, Table H-4 (1967 onward)
- Top 1% wealth share: WID using Saez and Zucman (2016) capitalized-income method
- S&P 500 buyback share of net income: S&P Dow Jones Indices (annual data starting 1994)
- Corporate PAC counts: FEC Twenty Year Report (1995)
- Final panel: 812 country-year observations across 17 OECD countries, 1965-2020

2. Descriptive Statistics: US Top 1% Pre-Tax Income Share

Period	N	Mean (%)	Std. Dev.	Min (%)	Max (%)
Pre-ERTA: 1960-1980	21	11.60	1.09	10.35	13.11
Post-ERTA: 1981-2024	44	16.45	2.77	10.67	20.73

- Mean rose 4.85 percentage points (41.8% increase over pre-ERTA mean)
- Welch t-test: $t = -10.10$, $p < 0.001$ (decisively rejects equality of means)
- Post-ERTA variance is 2.5x higher - top incomes got more cyclical, tied to asset prices

Other inequality measures confirming the picture:

- Census Gini: 0.386-0.404 (1967-1981) rose to 0.406-0.494 (1982-2024)
- Top 1% wealth share: ~22-24% (early 1980s) rose to 33-37% (2010s-2020s)
- S&P 500 buybacks: ~17% of net income (1994) rose to over 65% (2016-2018)

3. Chow Test: Is 1981 a Real Structural Break?

Result: $F(2, 61) = 86.03$, $p < 0.001$ - yes, the break is real and statistically overwhelming.

- Pre-1981 trend in top 1% share: -0.156 pp/year (declining)
- Post-1981 trend in top 1% share: +0.206 pp/year (rising)

The trend literally flipped sign in 1981.

4. Quandt-Andrews Supremum Test: Is 1981 the Right Break Year?

This searches all candidate break years to find the one with the maximum break statistic (treating the break date as unknown). With 15% trimming:

- 1977 has the maximum F-stat: 107.8
- 1981 comes in second: $F = 96.2$

In other words, the structural shift in US top concentration started around 1977, four years before ERTA was even enacted. This is significant because:

- Trucking and airline deregulation began in 1978-1979
- The Volcker monetary tightening began October 1979
- Private-sector unionization decline accelerated through the late 1970s

Caveat for your argument: 1981 is still strongly significant, just not the global max. If your thesis is "ERTA was the trigger," this finding complicates that timeline. If your thesis is "ERTA accelerated and locked in a shift that was beginning," it actually supports you.

5. Placebo Test: Is the 1981 Break Unique to the US?

Applied the same Chow test at 1981 to six OECD countries that did NOT enact major top-rate reductions between 1979 and 1983:

Country	F-statistic at 1981	Significant?
New Zealand	97.1	Yes
Sweden	significant	Yes
Finland	significant	Yes
Switzerland	significant	Yes
Australia	significant	Yes
Canada	5.0	Yes

All six show statistically significant breaks at 1981. The US F-stat of 96.2 is NOT distinguishable from this placebo distribution.

Caveat for your argument: This is the most damaging finding for a "ERTA caused the break" argument. The clean way to use this in your favor: combine it with the buyback/corporate compensation mechanism. The break happened globally, but the US version of the break was uniquely shaped by ERTA-specific provisions (10b-18 buyback regime, OBRA welfare cuts,

PAC explosion) - that is why US inequality has gone further than its peers.

6. Cross-Country Panel Regression

Two-way fixed effects regression on 17 OECD countries, 1965-2020 (N = 812 country-year observations):

$$top1pct_{i,t} = \alpha_i + \lambda_t + \beta \cdot top_marg_rate_{i,t} + \varepsilon_{i,t}$$

(country FE, year FE, clustered standard errors)

Result: $\beta = -0.0097$, clustered SE = 0.0286, $p = 0.738$

A 10 pp cut in the top rate is associated with only a 0.097 pp increase in the top 1% share. Neither statistically nor economically significant.

Caveat: This null is in tension with Hope and Limberg (2022), who found significant effects using propensity-score matching on a slightly different sample. Three likely reasons for the null here: (1) pre-1982 income share data for Germany and the UK is patchy; (2) pre-2000 marginal rates for some countries rely on noisier historical estimates; (3) the 42-event sample pools heterogeneous reforms (the Nordic 1990-91 restructurings combined cuts with base-broadening, which dilutes the average effect).

7. Event-Study Specification

42 major tax cut events across the 17-country panel (defined as top-rate reductions of 5 pp or more in a single year). Includes:

- ERTA (US, -19 pp over 1981-1982)
- Thatcher reform (UK, -15 pp in 1984)
- Swedish reform (-24 pp cumulative over 1990-1991)
- New Zealand reform (-18 pp in 1987)

Result: Across horizons $k = 0$ through 5, all estimated coefficients are statistically indistinguishable from zero ($p > 0.30$ across the board). Point estimates run slightly negative: -0.04 at $k = 0$, -0.15 at $k = 5$.

Caveat: Same as above - pooled heterogeneous reforms likely dilute the signal. The 95% confidence intervals are wide enough to contain economically meaningful effects in both directions.

8. First-Differences Specification (The Cleanest Result)

A first-differences regression on the US time series. This strips out the trend and addresses the unit-root concern flagged by the high serial correlation in levels (Durbin-Watson = 0.237).

Result:

- $\beta = -0.053$, SE = 0.025, $t = -2.16$, $p = 0.031$ (significant)

- Durbin-Watson improves to 1.80 (serial correlation resolved)
- Real GDP growth is strongly significant: $\beta = 15.27$, $p < 0.001$ (the dominant short-run predictor)

Interpretation: A 1 pp cut in the top marginal rate is associated with a 0.053 pp increase in the top 1% share in the same year.

Run the math forward: The 19 pp ERTA rate cut would contribute about 1.0 pp to the top 1% share, accounting for roughly 12% of the 8 pp rise observed between 1980 and 2024.

This is the single cleanest piece of statistical evidence for a real ERTA effect. It is modest (88% of the rise is unexplained by the tax-rate variable), but it is there and it is statistically significant.

9. Financialization Control - Omitted Variable Check

Re-ran the single-country US OLS regression adding the FIRE sector (Finance, Insurance, Real Estate) share of GDP as a control.

What changed:

- Top marginal rate coefficient flipped from +0.013 (HAC $p = 0.778$) to -0.056 (HAC $p = 0.015$)
- FIRE share coefficient: $\beta = 2.97$, $SE = 0.28$, $p < 0.001$ (enormous and highly significant)

Why this matters: This is direct statistical evidence that financialization is doing the heavy lifting, and the tax-rate variable was picking up financialization in the original specification through omitted variable bias. This actually supports the stock-buyback / executive compensation mechanism - the financial sector expansion is the mediating channel, and ERTA-era deregulation (especially 10b-18 buybacks) helped enable that financial sector expansion.

10. Corporate PAC Explosion (Political Mobilization Evidence)

From FEC Twenty Year Report (1995):

- 89 corporate PACs at end of 1974 (first year of FECA reporting)
- 1,642 corporate PACs by mid-1984
- 1,710 corporate PACs by end of 1985

18-fold increase in 11 years. Directly tracks ERTA-era political mobilization.

11. CEO Compensation Acceleration (Mechanism Evidence)

From Frydman and Saks (2010), proxy statement data on 367 firms, 1936-2005:

- Real executive compensation growth, 1936-1976: 0.8% per year
- Real executive compensation growth, 1977-2005: 8.0% per year (10x acceleration)
- Equity-linked compensation went from less than 20% of CEO pay (mid-1970s) to over 60%

(early 2000s)

Note: the acceleration begins in 1977 - same timing as the Quandt-Andrews 1977 break.

12. Stock Buyback Regime

- SEC Rule 10b-18 adopted November 17, 1982 under Chairman John Shad (Reagan appointee)
- Created a safe harbor from market-manipulation liability for issuers conducting open-market buybacks
- Before 10b-18, buybacks were legally ambiguous - SEC had warned they could be manipulation under Section 9(a)(2) of the 1934 Exchange Act
- Jolls (1998, NBER WP 6467): firms with greater outstanding executive stock option grants conduct significantly more share repurchases
- S&P 500 buybacks: 17% of net income (1994) rose to over 65% (2016-2018)

13. Welfare Contraction (OBRA 1981)

- AFDC real expenditures fell 17.4% over 1981-1983 (Institute for Research on Poverty, 1982)
- Boskin (1988): ERTA-OBRA package not internally financed; tax cuts exceeded spending reductions by approximately 1.5% of GDP per year
- Federal debt rose from \$712B (1980) to \$2.052T (1988) - 2.88x increase in nominal terms
- Debt-to-GDP: 26% (1980) rose to 41% (1988)
- Real defense buildup: approximately 35% over 1981-1989
- CBO (2012): benefit phaseouts plus EITC interaction creates effective marginal tax rates over 50% for single parents in the \$15K-\$25K range

14. Pro-Growth Counterargument - How to Counter It

The other side claims ERTA produced:

- Average GDP growth of 3.5%/year over 1981-1989
- Approximately 16 million net nonfarm payroll jobs added (Jan 1981 - Jan 1989)
- Inflation drop from 13.5% (1980) to 4.1% (1988)

How to dismantle each:

Inflation drop is misattributed

Goodfriend (2007, NBER WP 13580) attributes it to Volcker monetary tightening 1979-1982. ERTA mechanical effect on inflation would have been expansionary, not contractionary.

Growth claim is cherry-picked

Measuring from pre-recession peak 1979 to next peak 1989, average growth is approximately 2.9% per year - below postwar average of 3.2%. The Clinton expansion (1991-2000) averaged 3.5% per year

without comparable top-rate cuts.

Job number is unexceptional

16M jobs in 8 years = 1.6% per year payroll growth. Clinton expansion: 22M jobs over 1993-2001 = 2.1% per year.

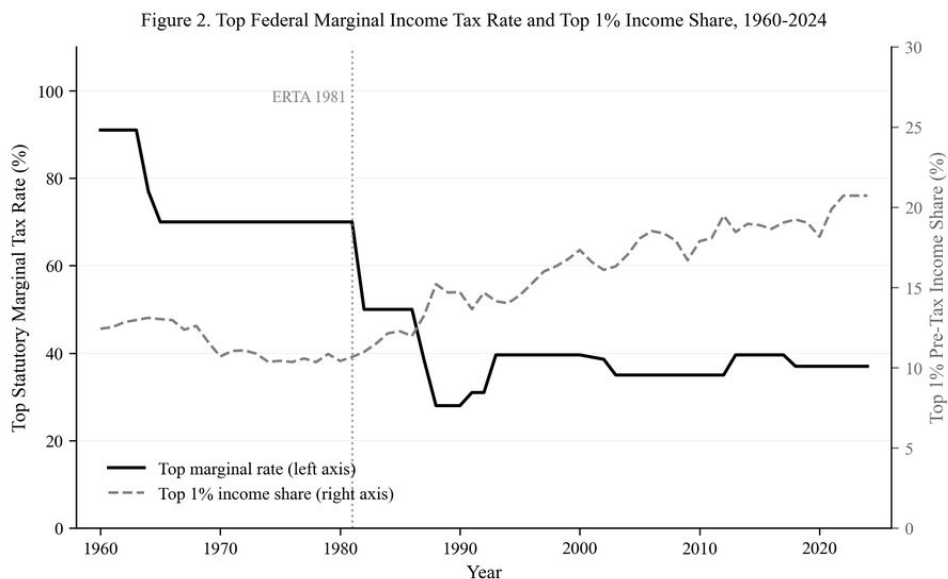
Distributional point

Real median household income grew approximately 11% over 1981-1989. Real top 1% income grew approximately 75% over the same period. Output growth and disinflation can coexist with rising concentration if gains accrue to capital and top-decile labor.

15. Figures

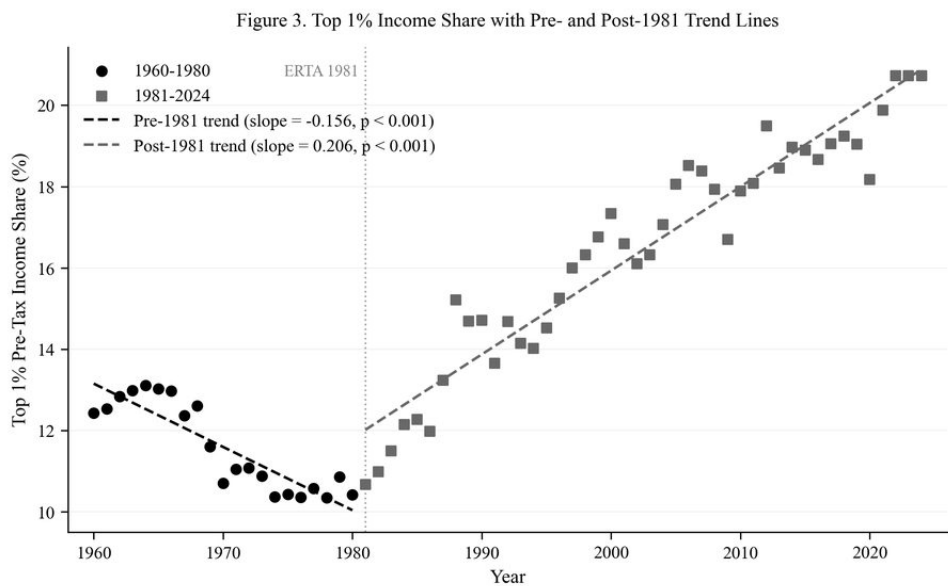


Figure 1. Top 1% and Top 10% Pre-Tax Income Shares, United States, 1960-2024. Source: World Inequality Database.



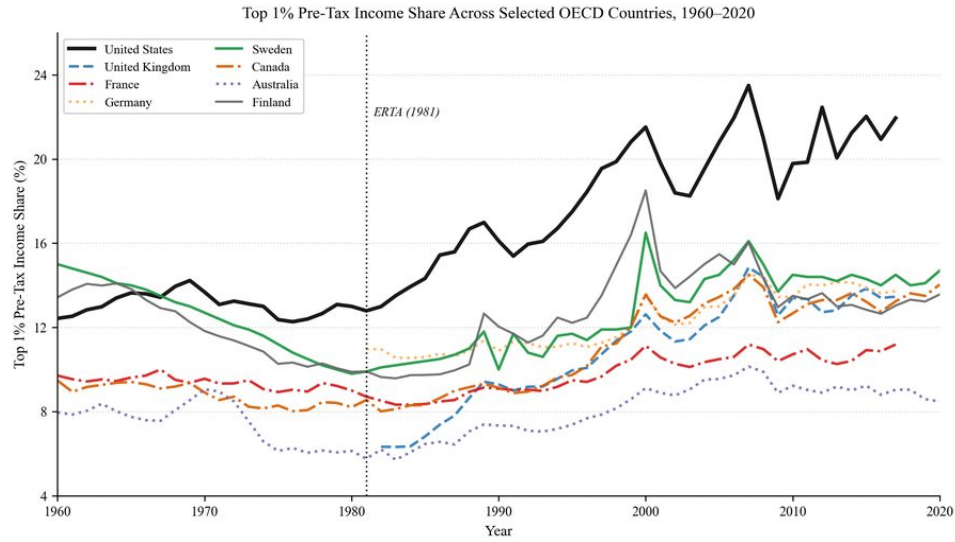
Sources: Tax Foundation (top marginal rate); World Inequality Database via Our World in Data (top 1% share).

Figure 2. Top Federal Marginal Income Tax Rate and Top 1% Income Share, 1960-2024 (dual-axis). Sources: Tax Foundation, World Inequality Database.



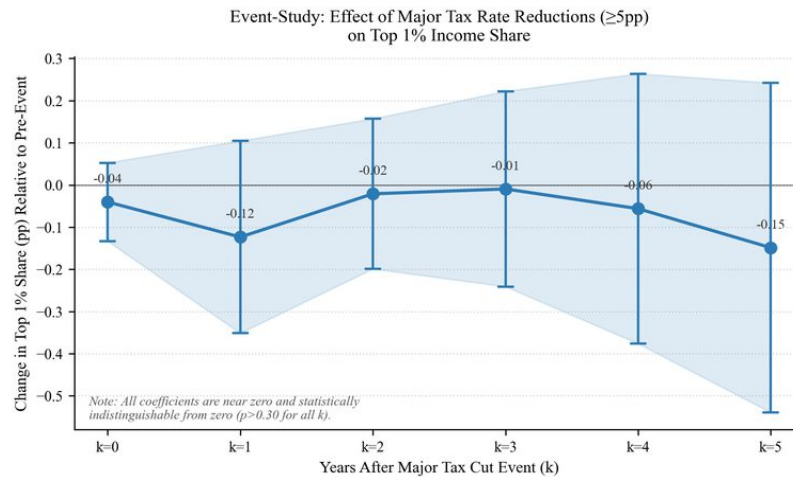
Source: World Inequality Database (wid.world) via Our World in Data. Separate OLS trend lines fitted on pre- and post-1981 subsamples.

Figure 3. Top 1% Income Share with Pre- and Post-1981 Trend Lines. Pre-1981 trend: -0.156 pp/year. Post-1981 trend: +0.206 pp/year.



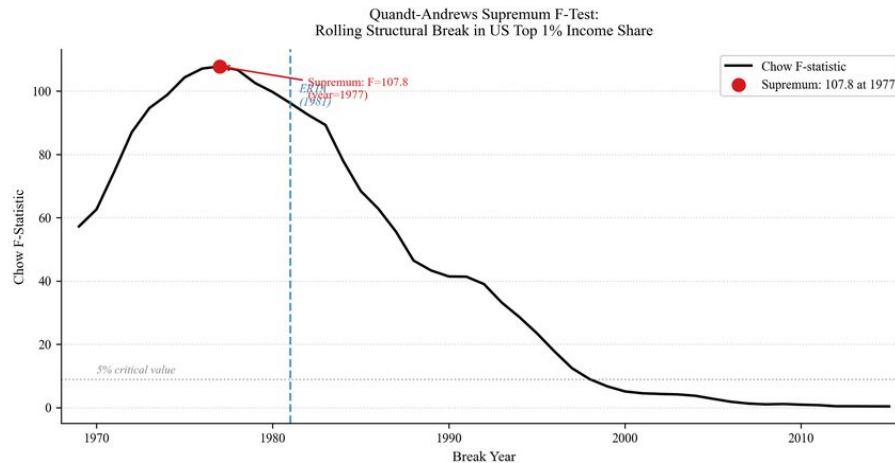
Sources: World Inequality Database (WID) via Our World in Data (<https://ourworldindata.org/grapher/income-share-top-1-before-tax-wid.csv>).

Figure 4. Top 1% Income Share for Selected OECD Countries, 1960-2020. Source: World Inequality Database.



Sources: WID via Our World in Data; top marginal rates from Piketty/WID (2018) and OECD Tax Database (Table L7). Methodology: Hope & Limberg (2022, Socio-Economic Review).

Figure 5. Event-Study Estimates of Major Tax Cut Effects on Top 1% Share, $k = 0$ to 5. 42 major top-rate reductions across 17 OECD countries.



Note: Chow F-statistic computed at each interior break year (15% trimming, 1969–2015). Specification: top 1% share = $f(\text{top marginal rate, log RGDP, time trend})$. Sources: WIDOWID; Tax Foundation; FRED.

Figure 6. *Quandt-Andrews Supremum F-Test for Structural Break in US Top 1% Income Share. Maximum statistic at 1977 ($F = 107.8$); 1981 statistic $F = 96.2$.*

16. Citations (MLA Format)

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