Behavioral Responses to Taxation: Preliminary Evidence from the 2013 Tax Increase

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NTA Meetings

MOTIVATION

Controversial debate on the proper taxation of top incomes

Debate hinges on how taxation of top incomes affects the economy and in particular reported top incomes

Large body of empirical work using US tax reforms (Saez, Slemrod, Giertz JEL 2012)

Key lesson: clear evidence of "avoidance" responses when such opportunities are available

2013 top tax rate increases offer an opportunity to revisit

2013 TOP TAX RATE INCREASES: SUMMARY

Significant increase in top tax rates in 2013:

+6.5 points for labor income

+9.5 points for capital income (both ordinary and preferred)

No tax rate increase for incomes below $250K (bottom 97%)

Increases apply fully above around $500K ($\simeq$ top 1%)

Increase was expected when Obama re-elected in early November 2012 (but actual increase enacted in early January 2013)

TWO TAX REFORM COMPONENTS

1) ACA (Obamacare) surtax:

+3.8 points on capital income (above $250K)

+0.9 points on labor income (above $250K)

S-corporation "active" profits are exempt

2) Individual income tax top bracket (above $450K):

Top ordinary tax rate increases from 35% to 39.6%

Divs/capital gains top tax rate increases from 15% to 20%

Phasing-out of itemized deductions adds $\simeq$ 1 point increase

EXPECTED BEHAVIORAL RESPONSES

1) Short-term retiming: Likely

Acceleration of realized income in 2012 (to avoid 2013 higher rates)

Particularly for realized capital gains (as in 1986 when KG tax rate ↑ from 20 to 28%), stock-option exercises (as in 1993 when ordinary top rate ↑ from 31 to 39.6%)

⇒ Spike in top incomes in 2012 followed by trough in 2013

2) Individual to corporate shifting? Unlikely

S-corp form remains more favorable than C-corp (as in 1993)

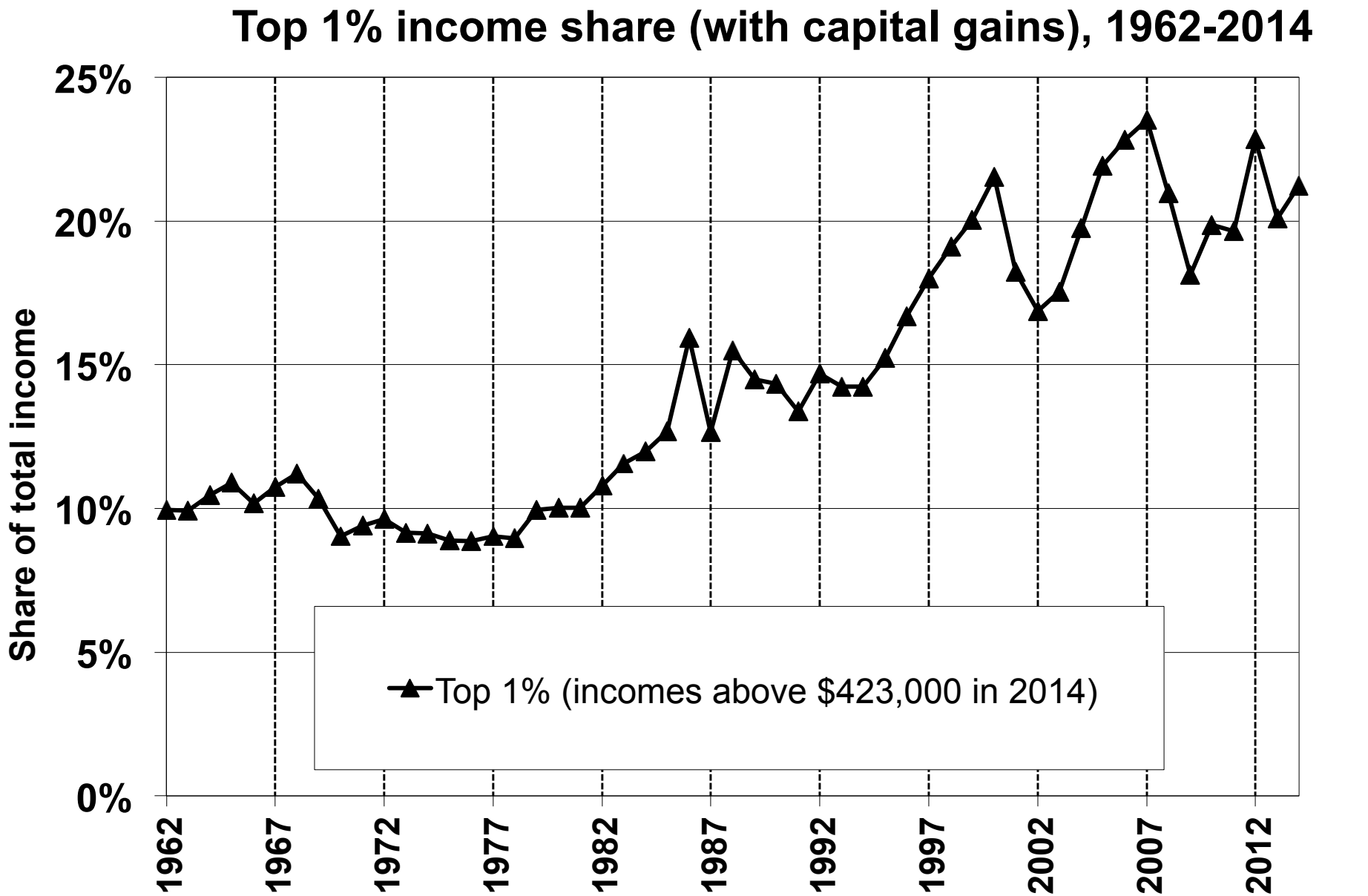
3) Long-term effect: fall in top income shares?

Unlikely based on 1993 experience

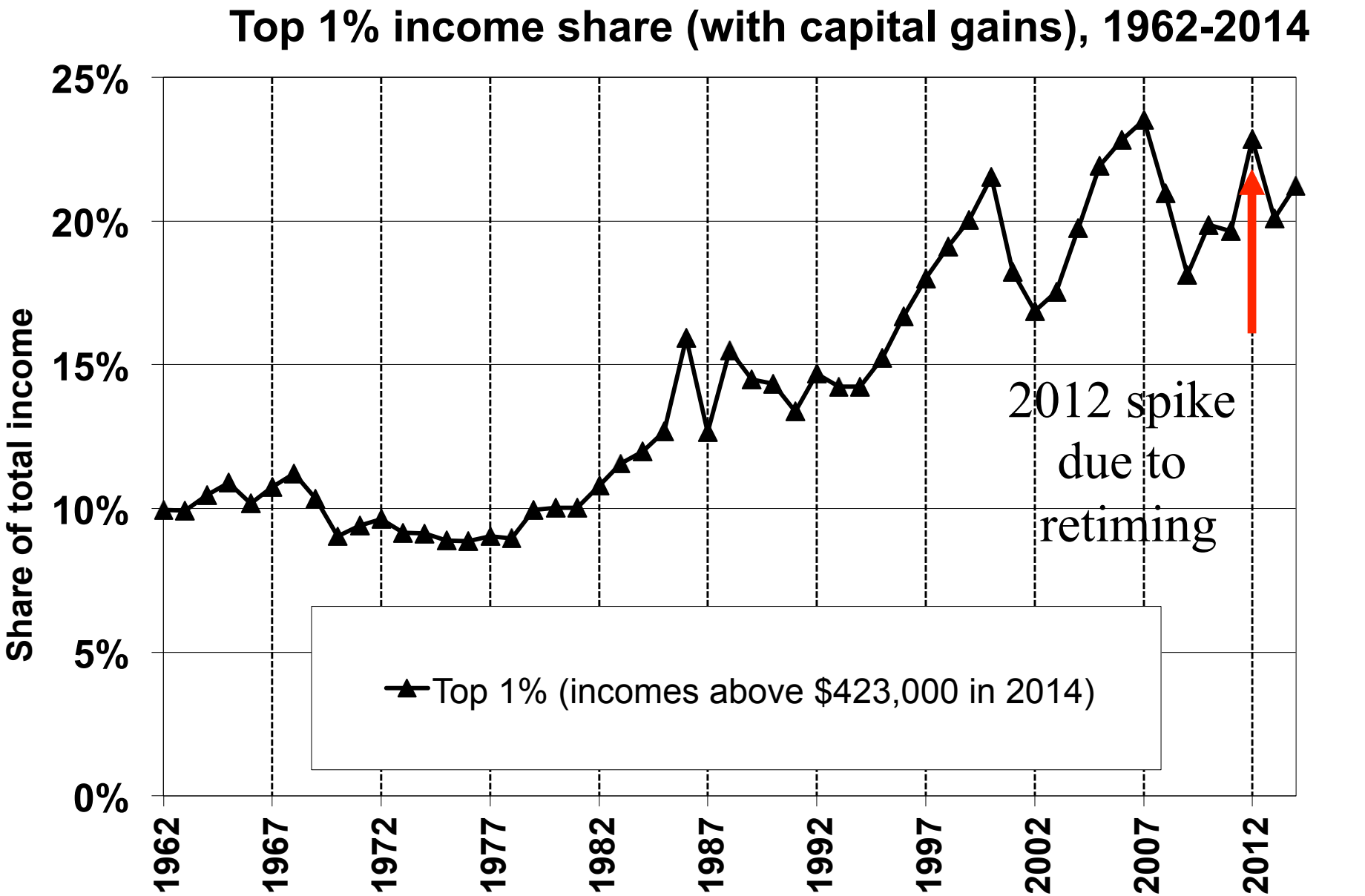
METHODOLOGY

Simplest and most transparent method is to analyze top income shares and their composition (Saez TPE '04)

My view: panel methods of Feldstein JPE'95, Gruber-Saez JpubE'02 are much less transparent and robust



Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.



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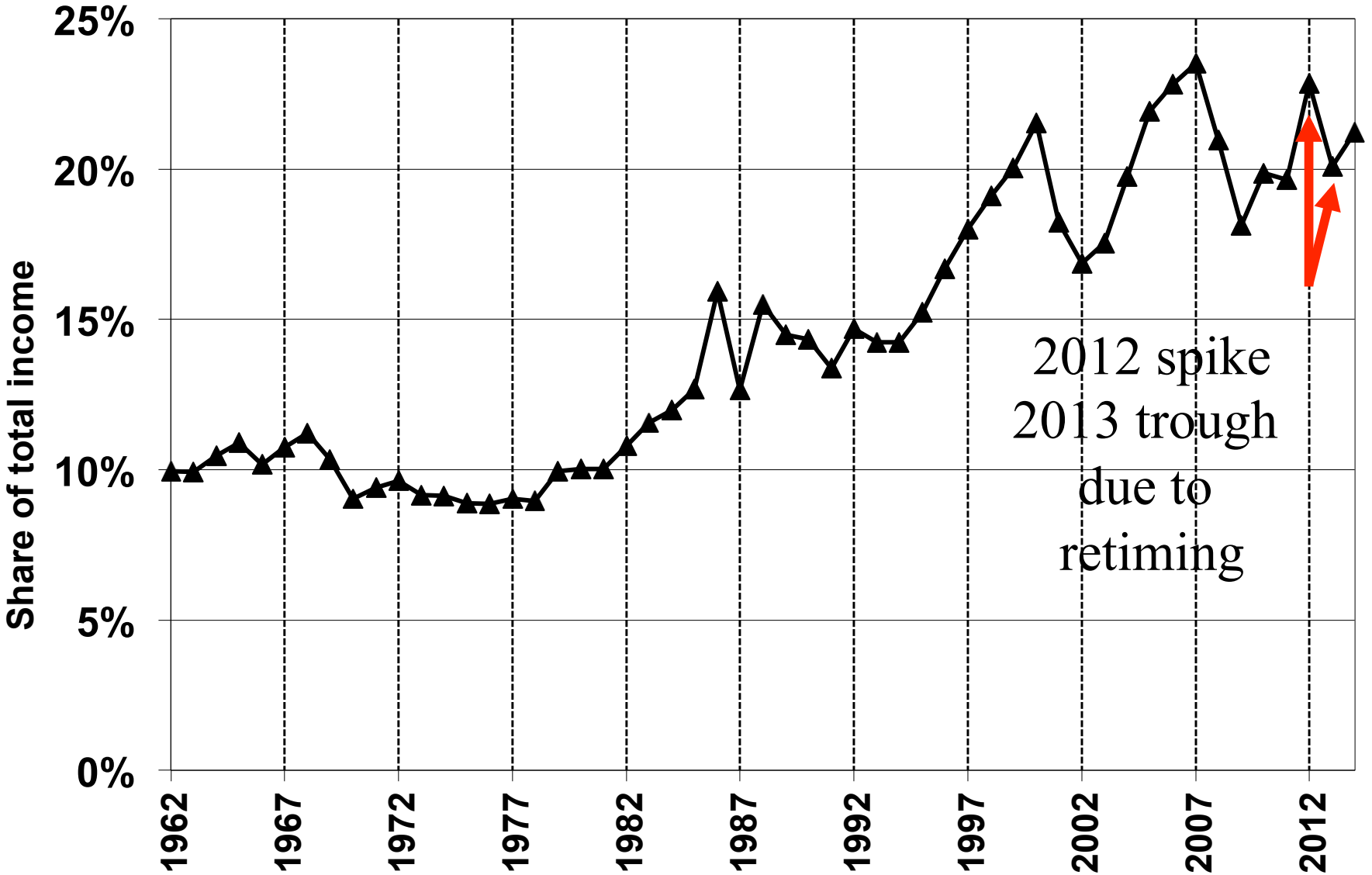
Top 1% income share (with capital gains), 1962-2014



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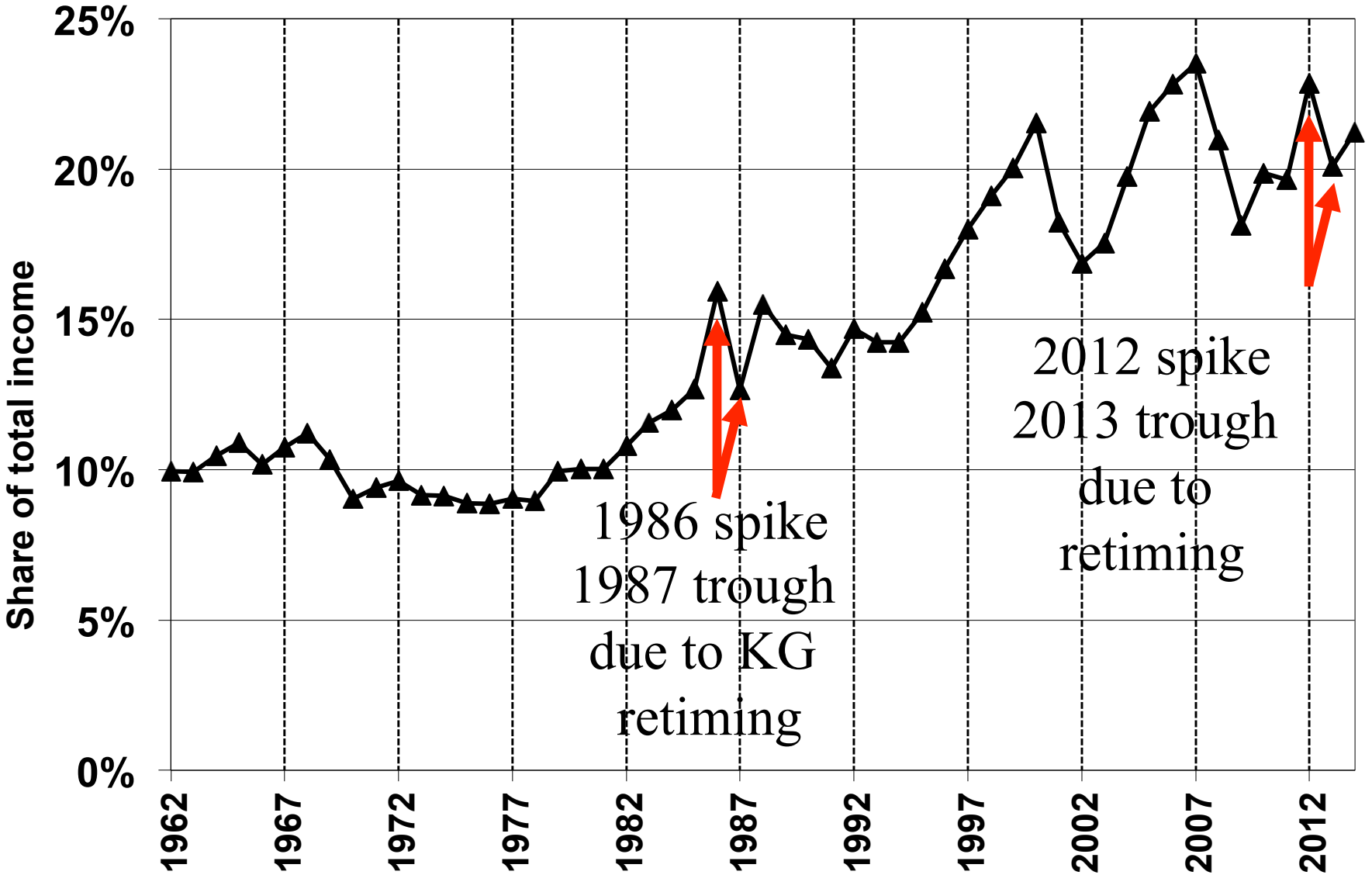

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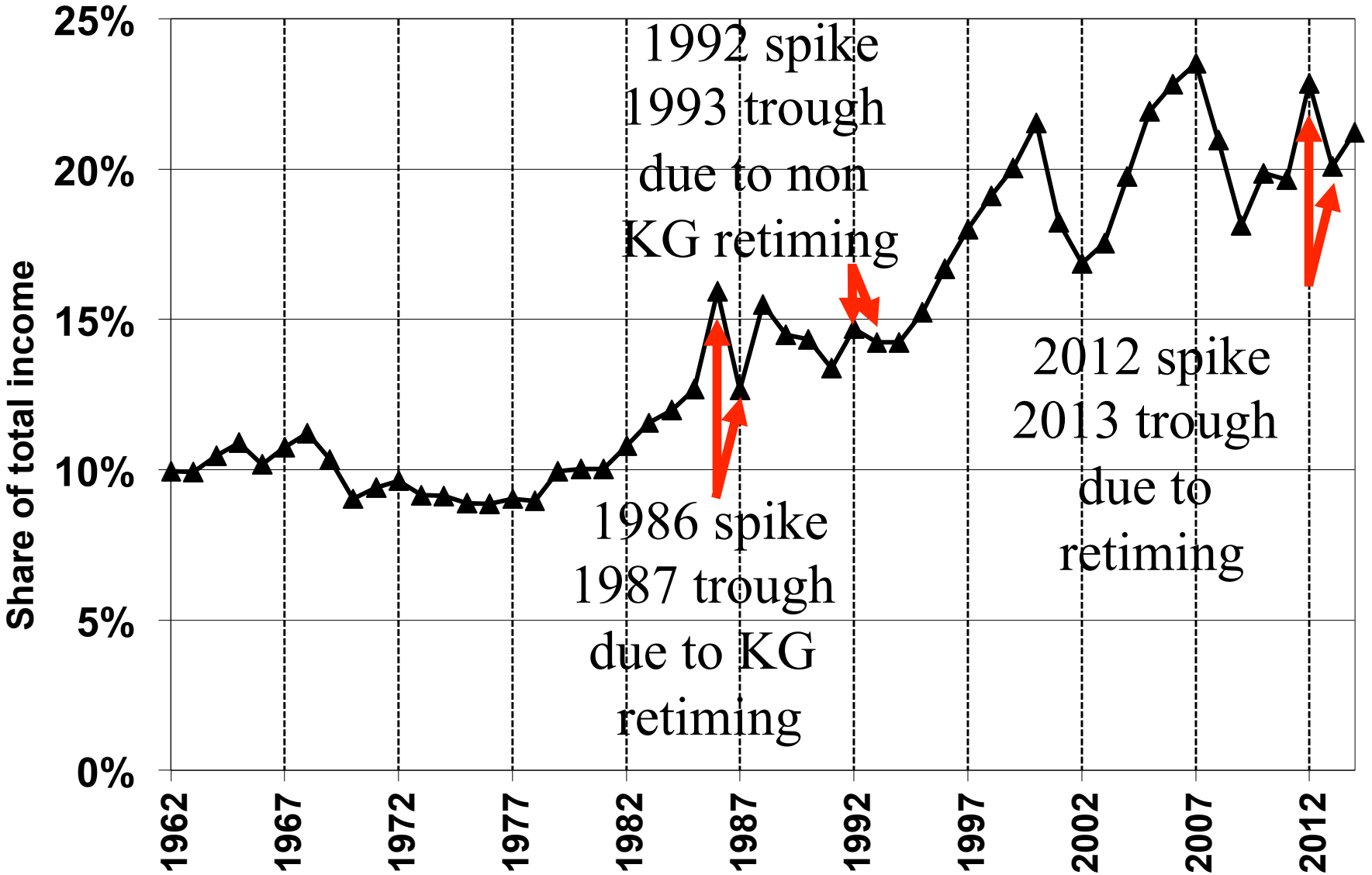

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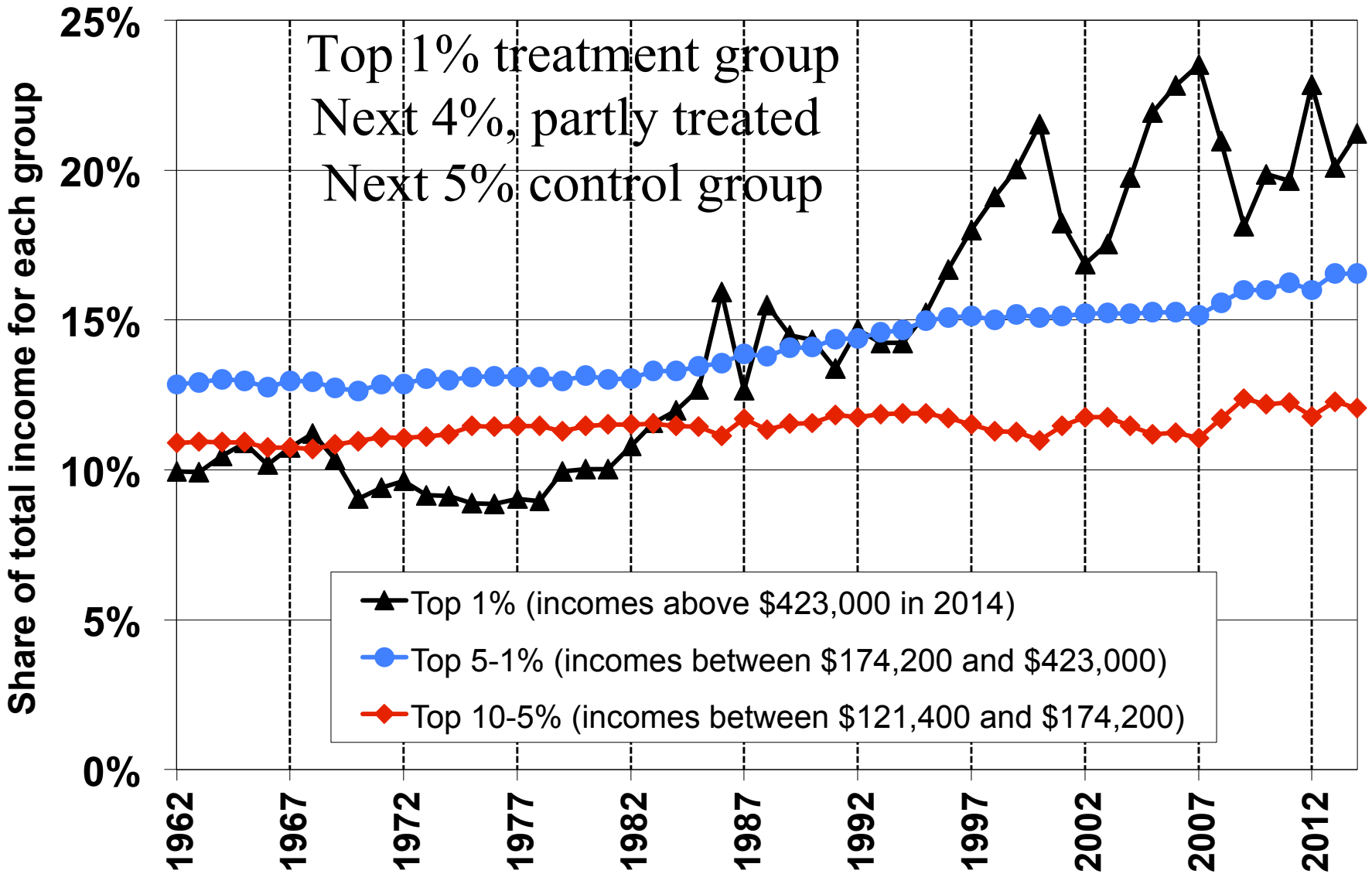
Top 1%, next 4%, next 5%, 1962-2014



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SHORT-TERM ELASTICITY ESTIMATION

$$e_S = \frac{\Delta \log sh}{\Delta \log(1 - MTR)} = \frac{\log sh_{2013} - \log sh_{2012}}{\log(1 - MTR_{2013}) - \log(1 - MTR_{2012})}$$

where sh_t is top income share and MTR_t is the average MTR for top group in year t

Identification assumption: absent tax change, $sh_{2013} = sh_{2012}$ [retiming spike is big relative to top income share trend]

This likely underestimates e_S as there is an overall upward trend in top income shares that goes in opposite direction to retiming

SHORT-TERM ELASTICITY ESTIMATION

Labor income: $MTR_{12} = 35\%$ to $MTR_{13} = 39.6 + 0.9 + 1.2\% \Rightarrow \Delta \log(1 - MTR) = -.11$

Ordinary capital income: $MTR_{12} = 35\%$ to $MTR_{13} = 39.6 + 3.8 + 1.2\% \Rightarrow \Delta \log(1 - MTR) = -.16$

Capital gains and dividends: $MTR_{12} = 15\%$ to $MTR_{13} = 20 + 3.8 + 0.6\% \Rightarrow \Delta \log(1 - MTR) = -.12$

Weighting by income components: $\Delta \log(1 - MTR) \simeq -0.13$

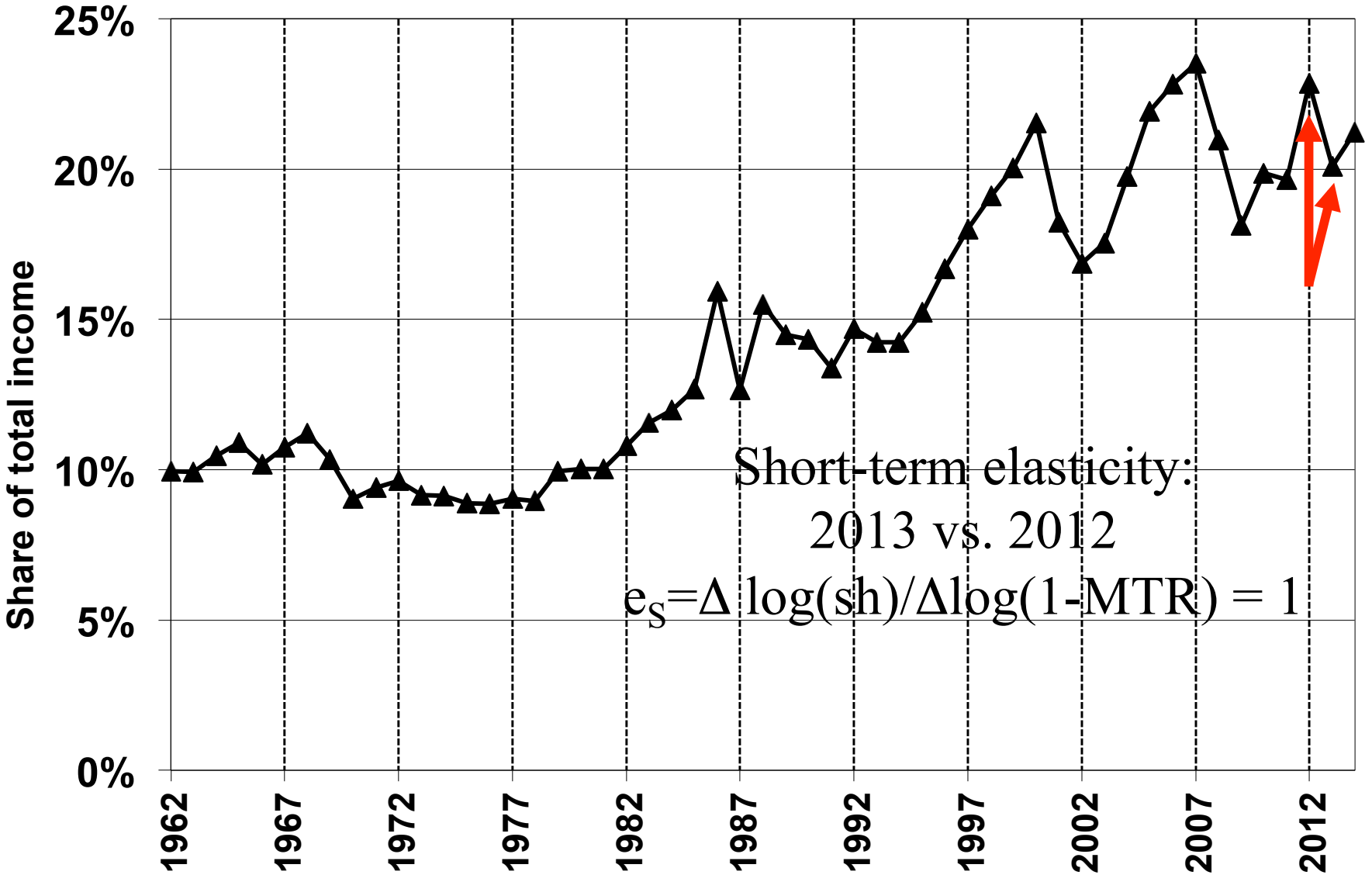
Top 1%: $\Delta \log sh = \log(20.1/22.8) = -.13 \Rightarrow e_S = 1.0$

Top 0.1%: $\Delta \log sh = \log(9.27/11.7) = -.233 \Rightarrow e_S = 1.8$

Top 1-0.1%: $\Delta \log sh = \log(10.4/11.1) = -.065 \Rightarrow e_S = 0.5$

Big elasticities: larger than in 1993, comparable to 1986

Top 1% income share (with capital gains), 1962-2014



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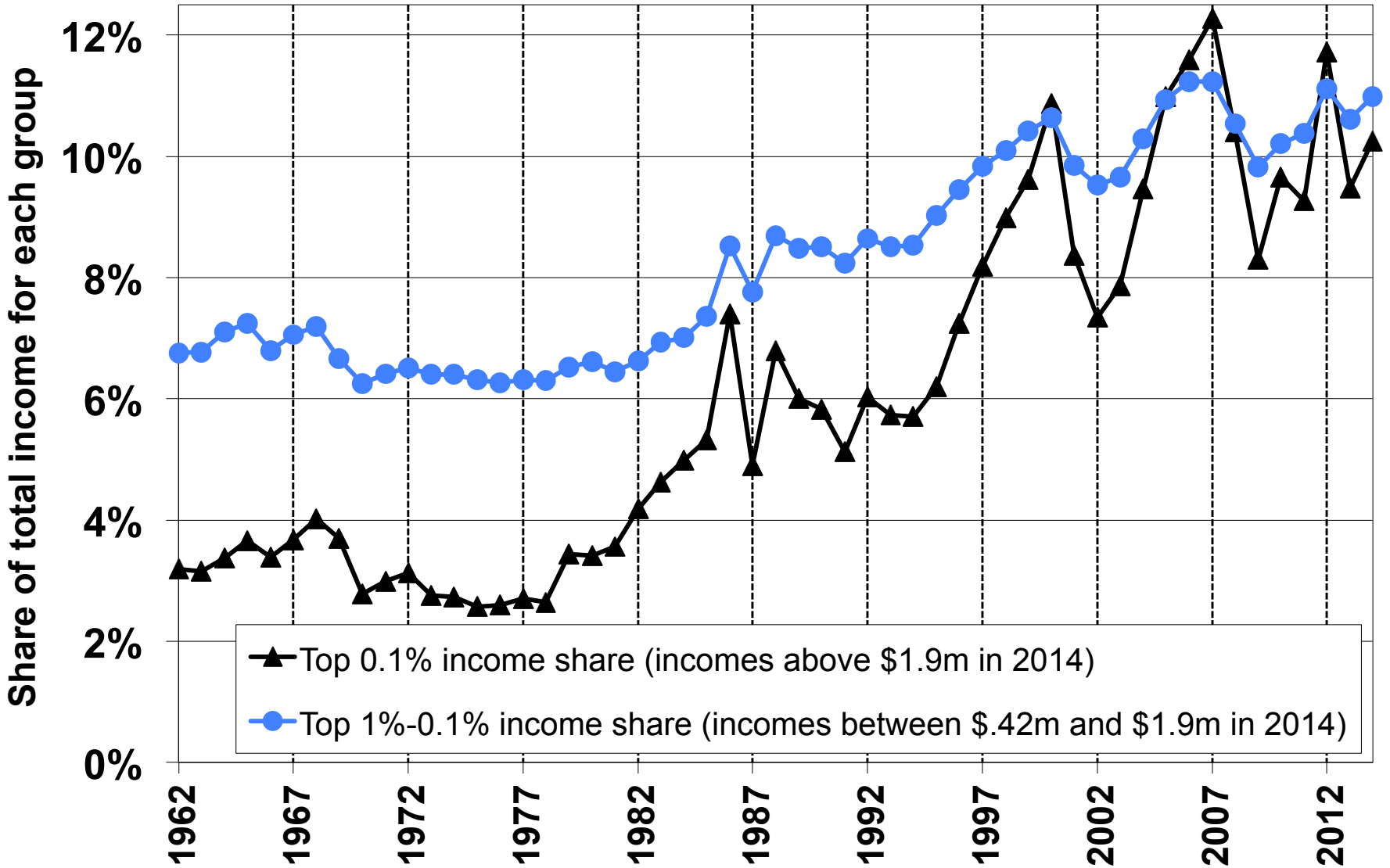
Decomposing Top 1% into top 0.1% and next 0.9%



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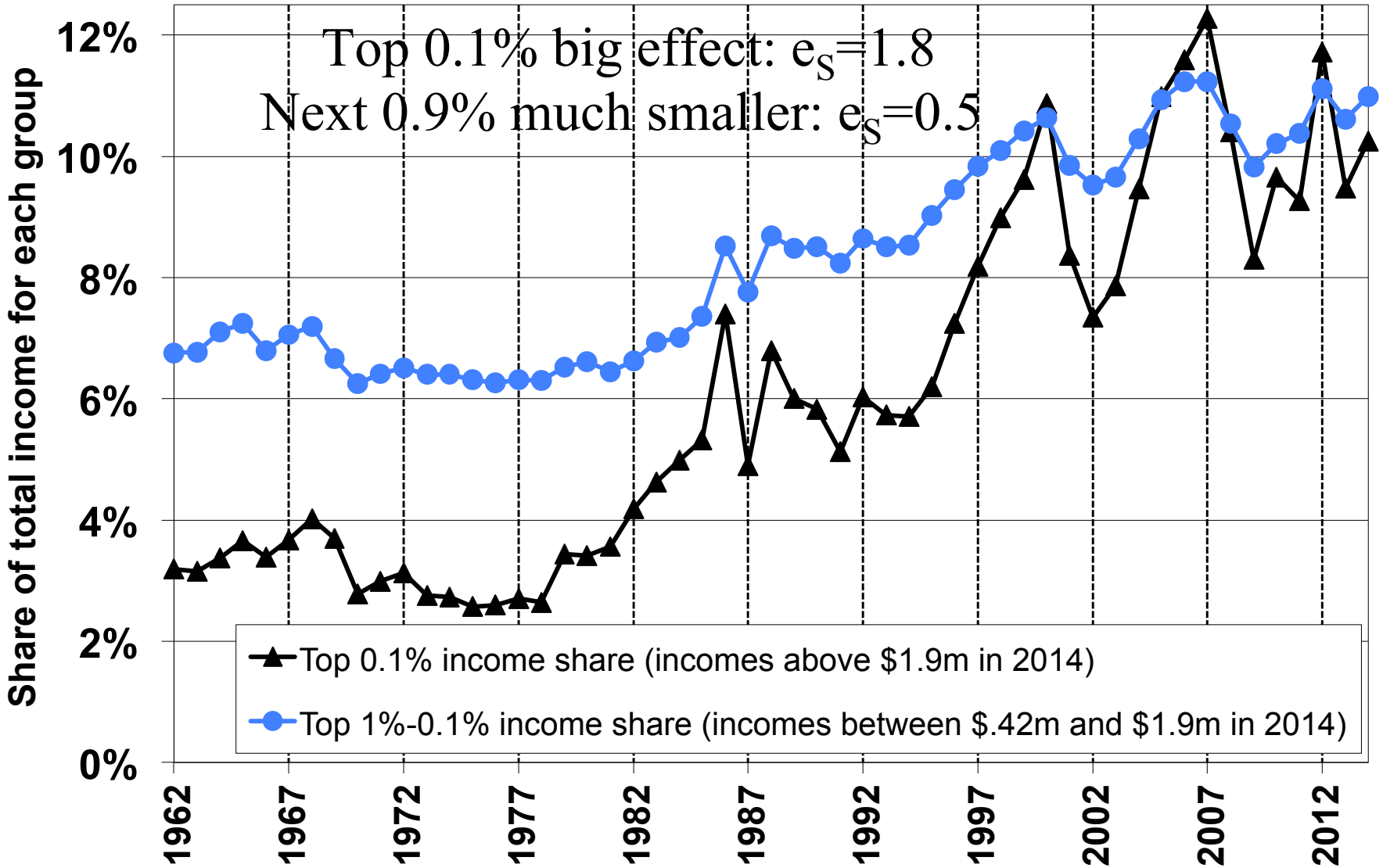

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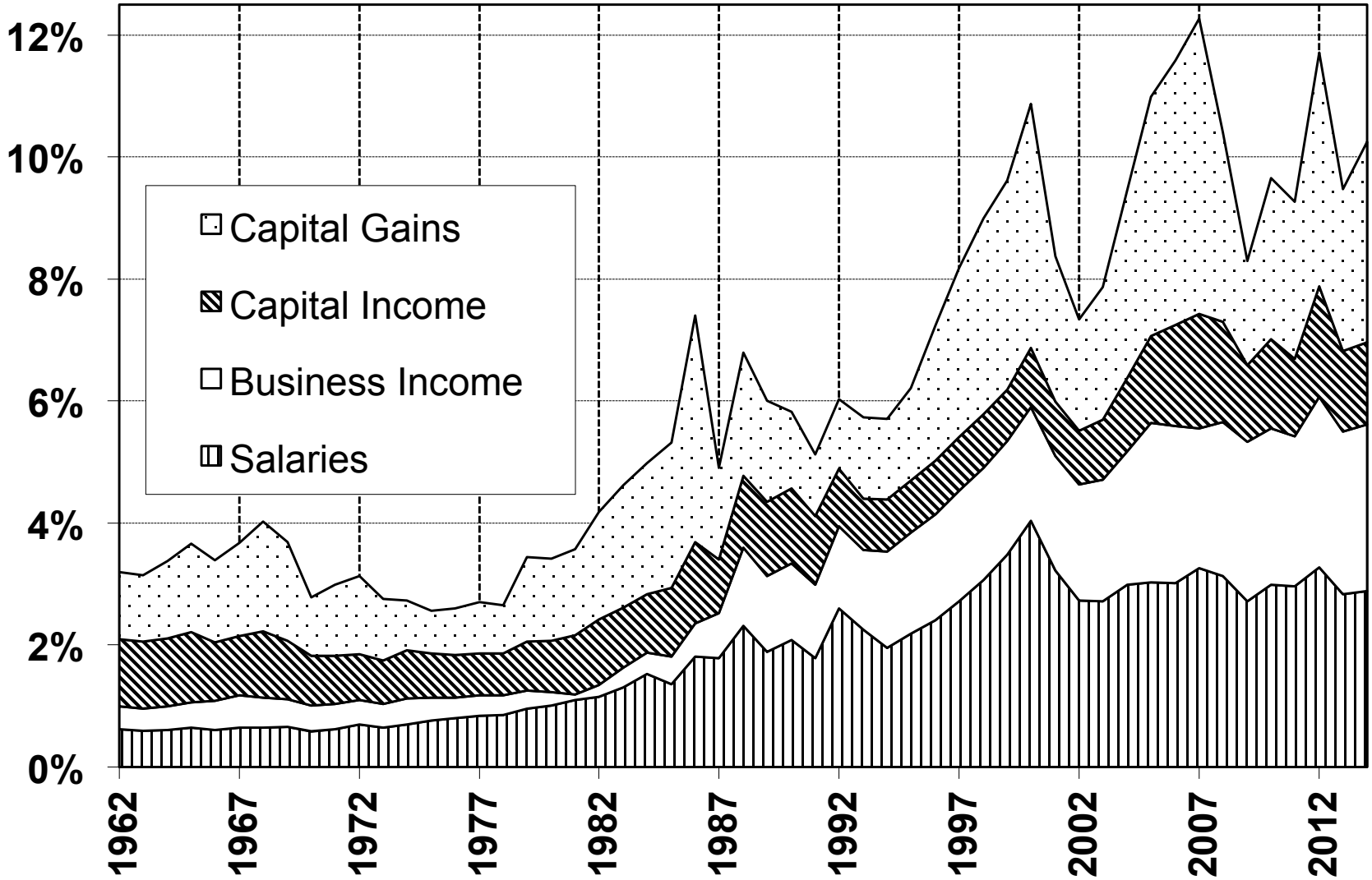
US Top 0.1% Pre-Tax Income Share and Composition, 1962-2014



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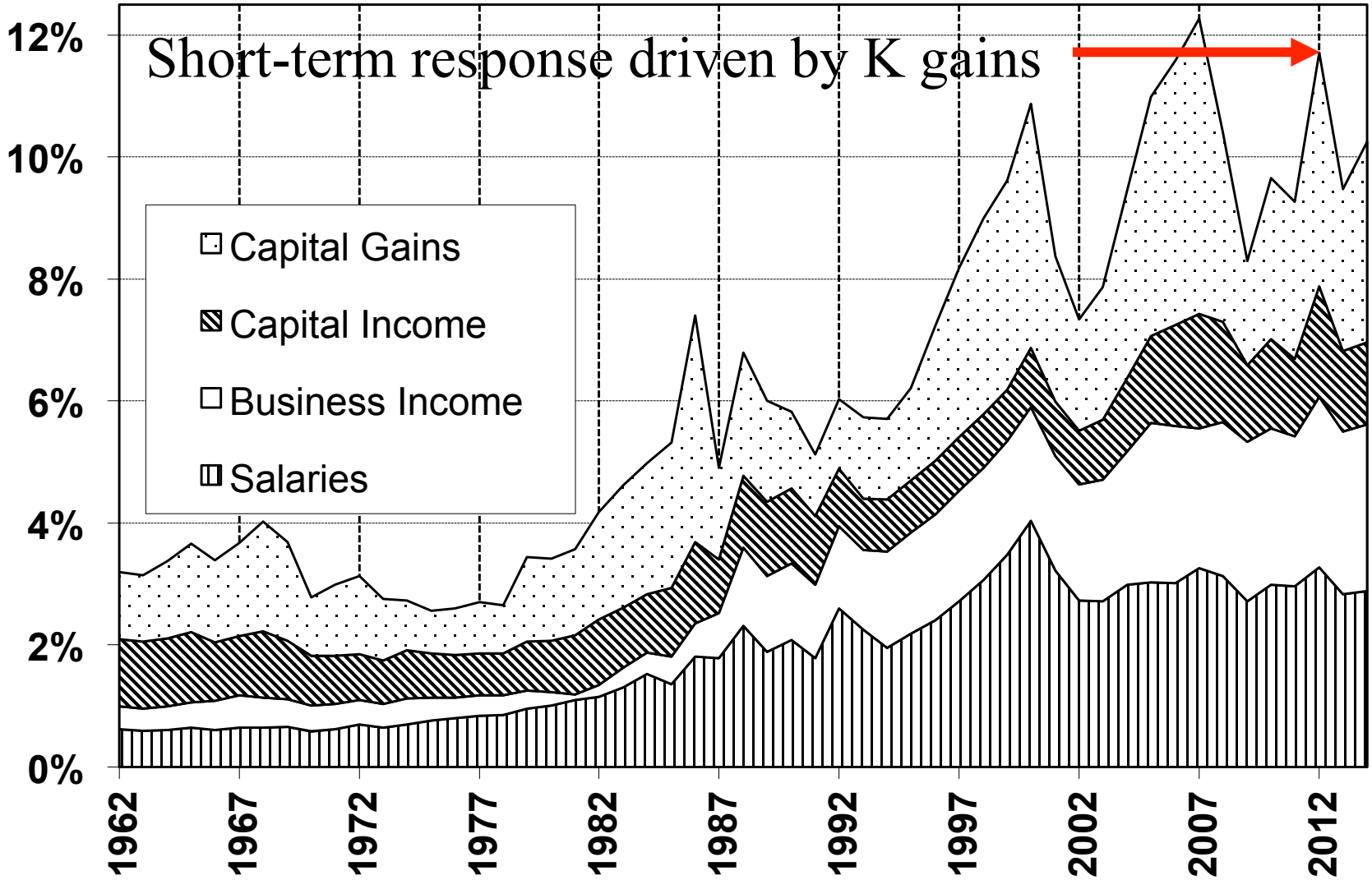

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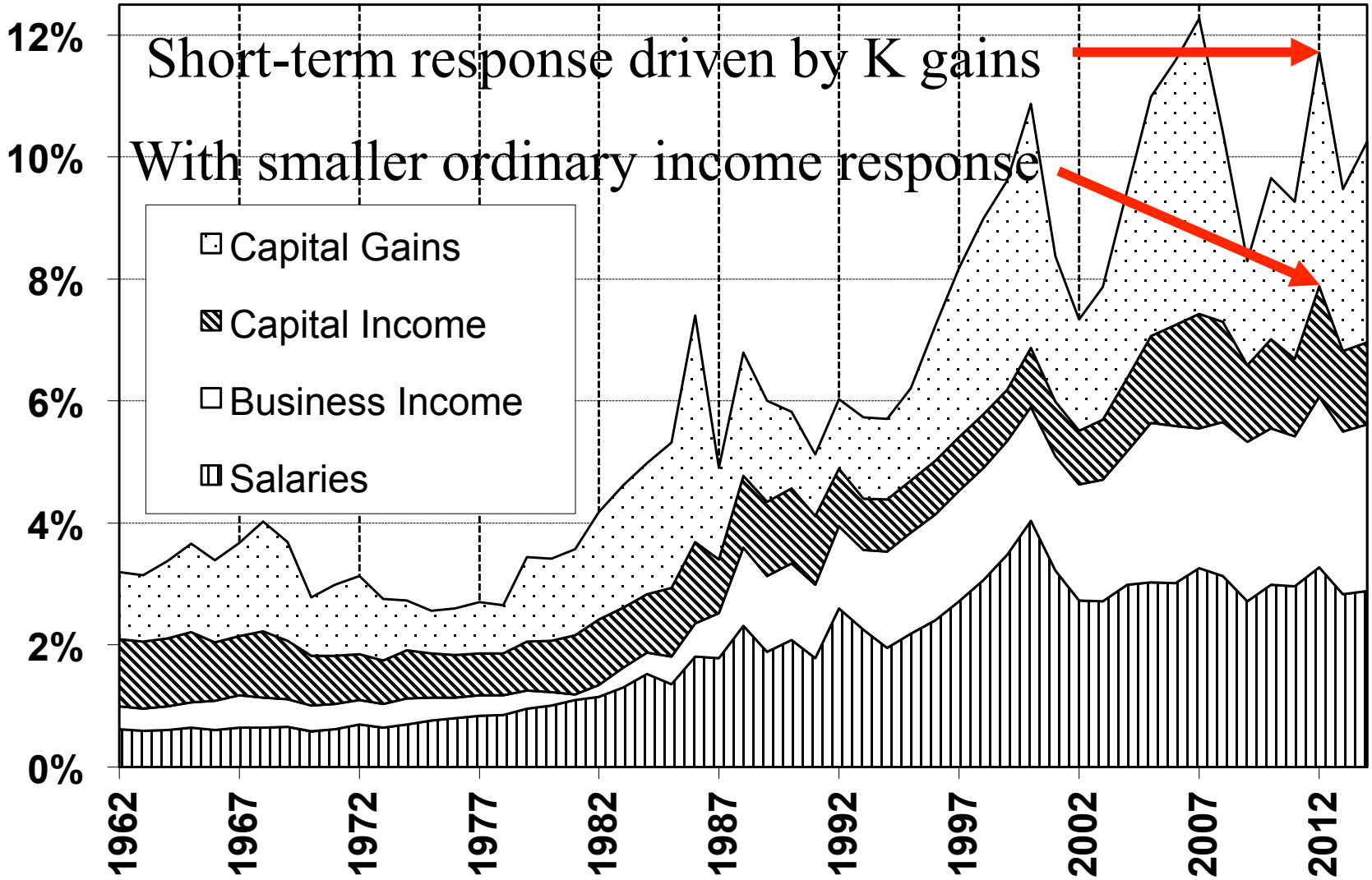

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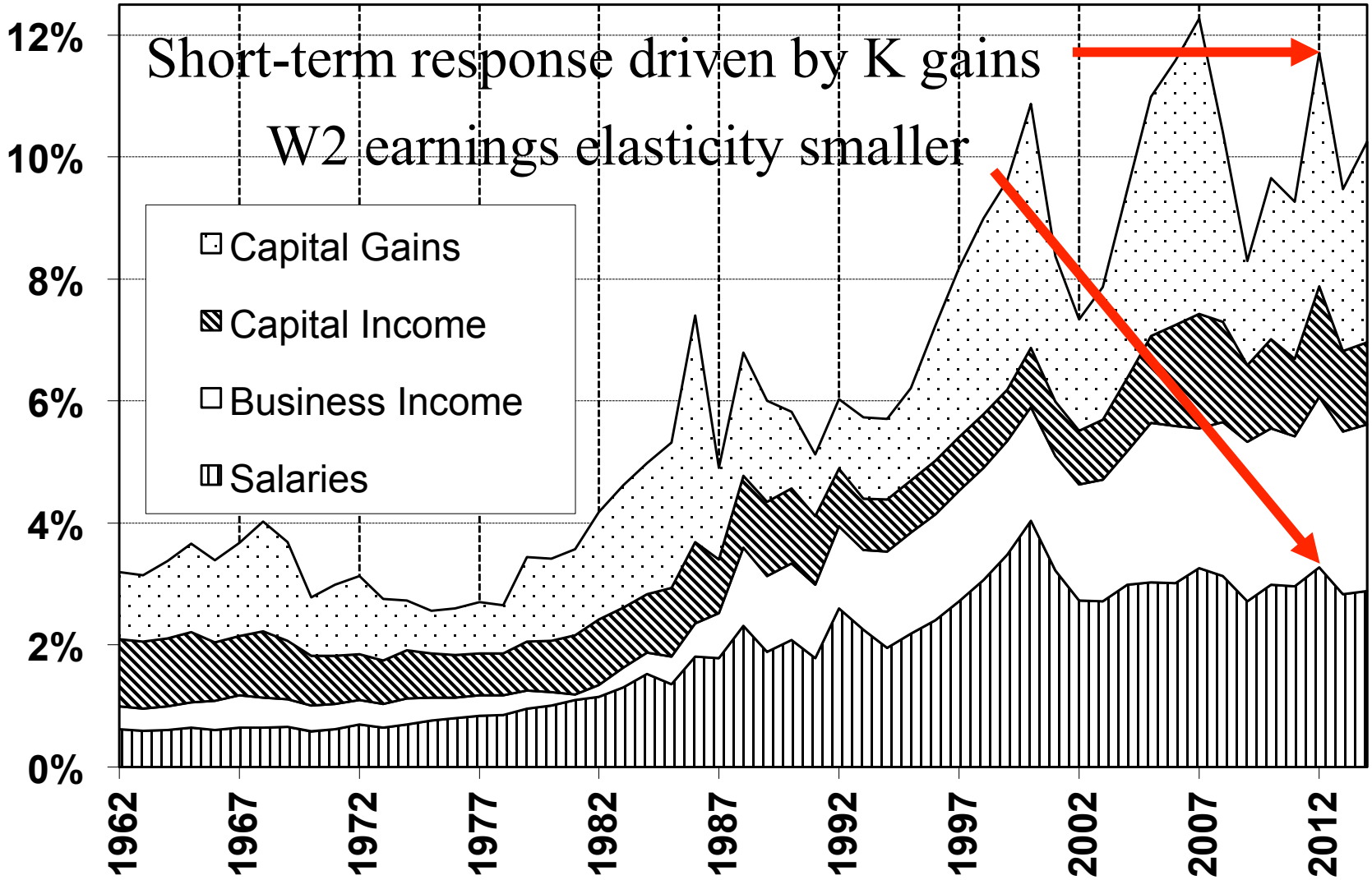

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MEDIUM-TERM ELASTICITY ESTIMATION

$$e_M = \frac{\Delta \log sh}{\Delta \log(1 - MTR)} = \frac{\log sh_{2014} - \log sh^c_{2014}}{\log(1 - MTR_{2014}) - \log(1 - MTR_{2011})}$$

where sh^c_{2014} is counterfactual top share absent the reform

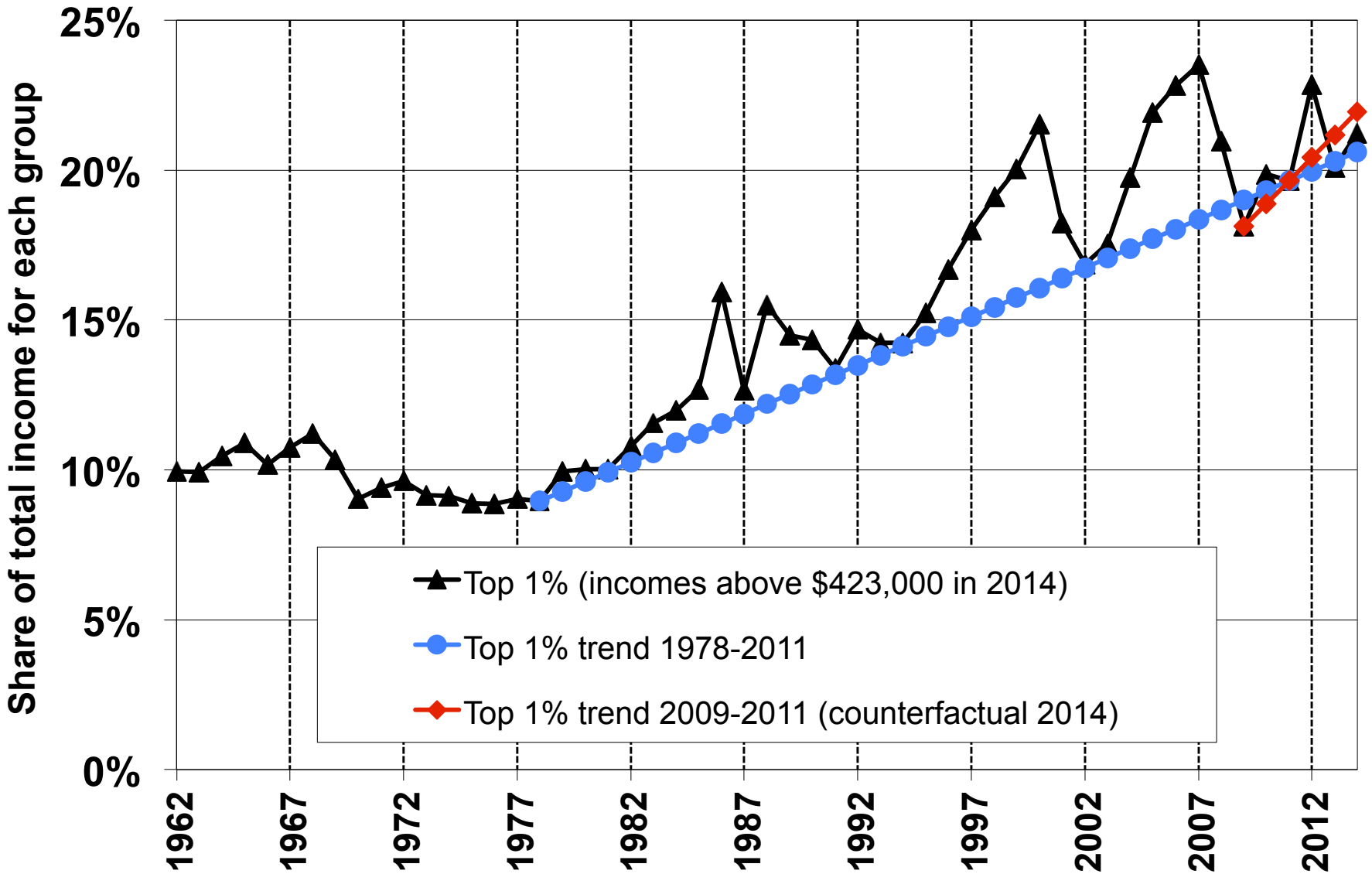
Difficult identification assumption: What is sh^c_{2014}?

Upward trend absent tax change likely given secular increase in top 1% income share [top 1% $\uparrow$ 0.32 pts/year in 1978-2011]

Conservative assumption: assume same trend over 2011-2014 as over 2009-2011 where top 1% grows fast by .76 pts/year

$$\Rightarrow sh^c_{2014} = sh_{2011} + 3 \times (sh_{2011} - sh_{2009})/2$$

Top 1% income share, 1962-2014



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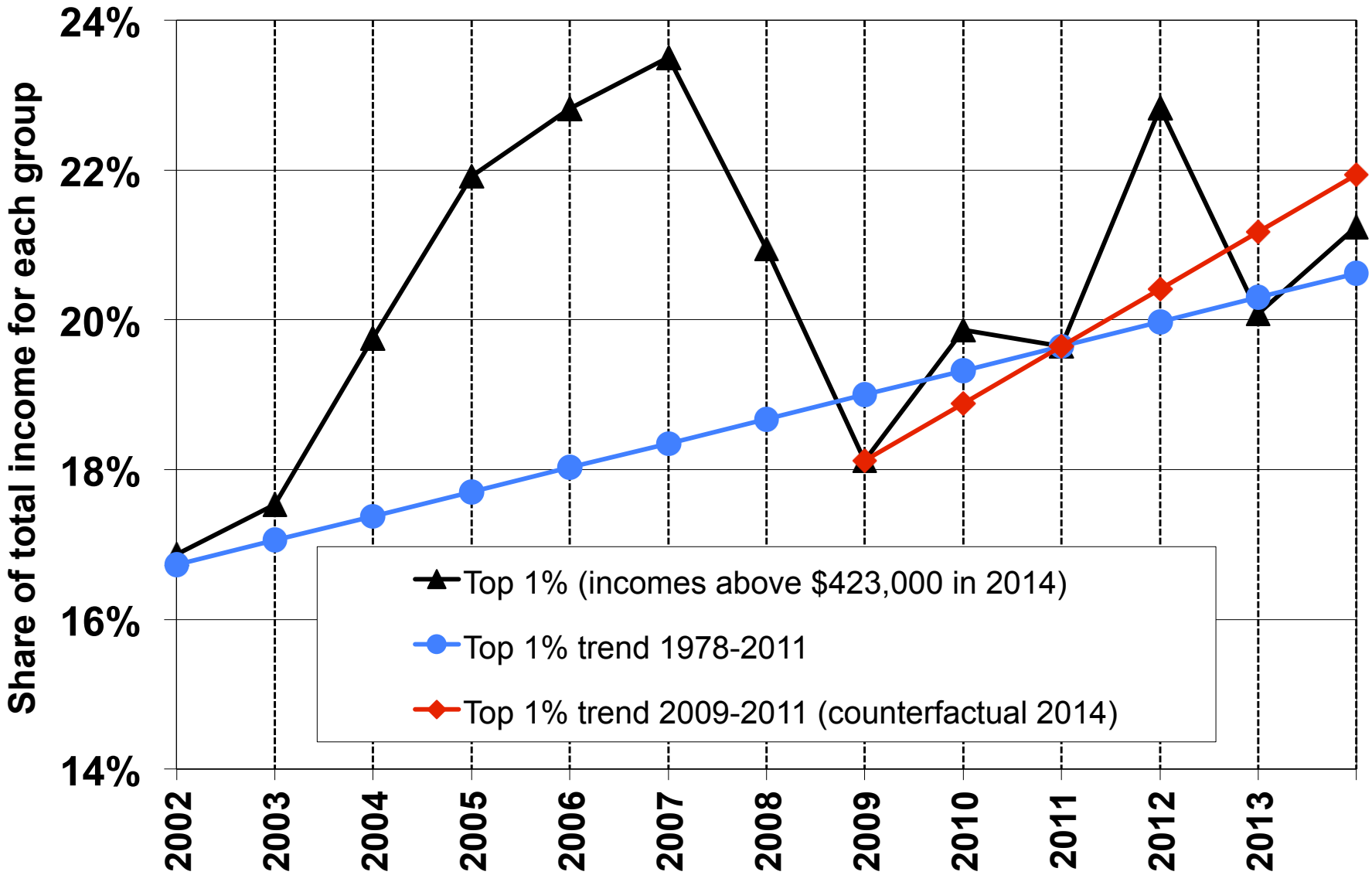
Top 1% income share, 2002-2014



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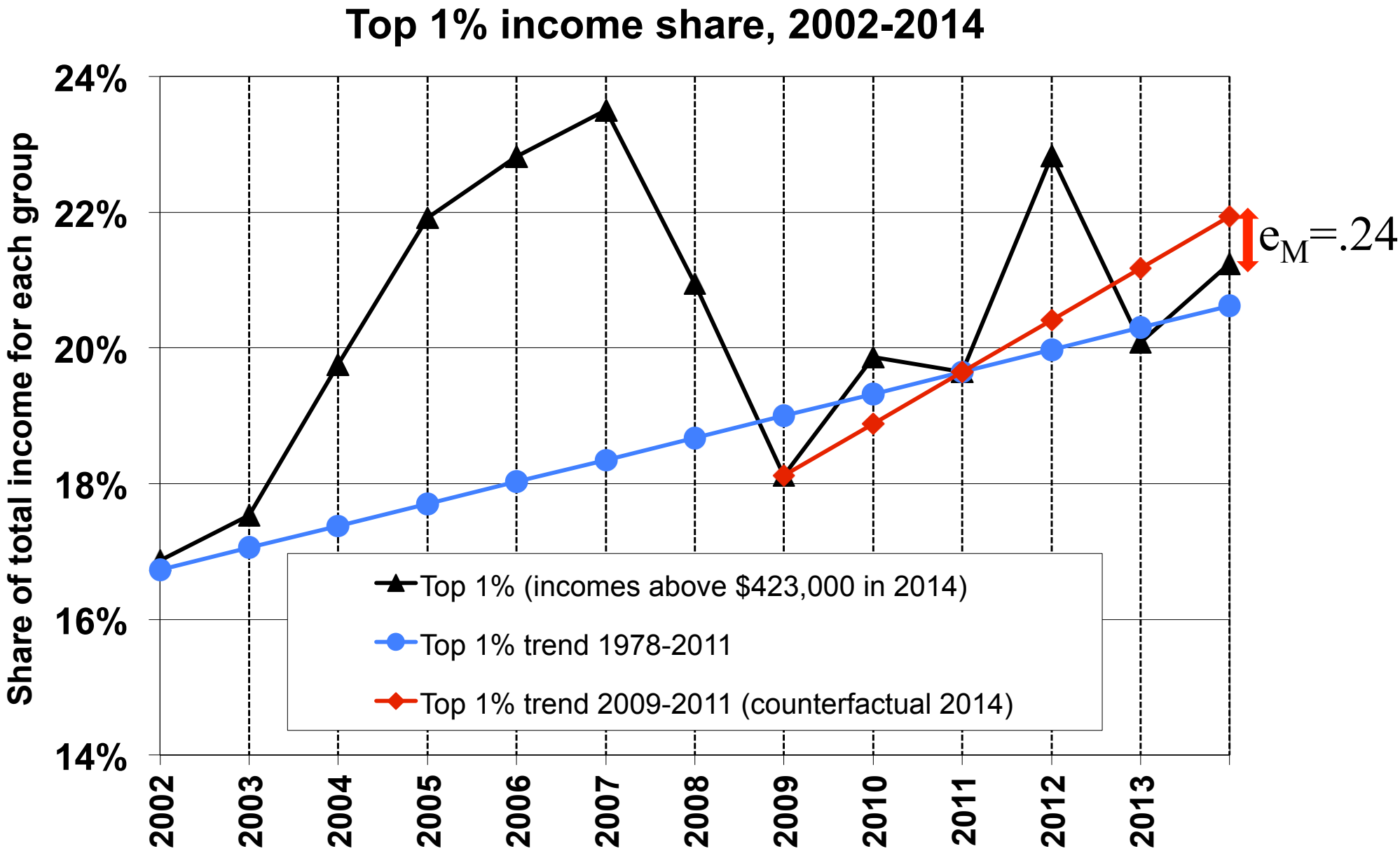

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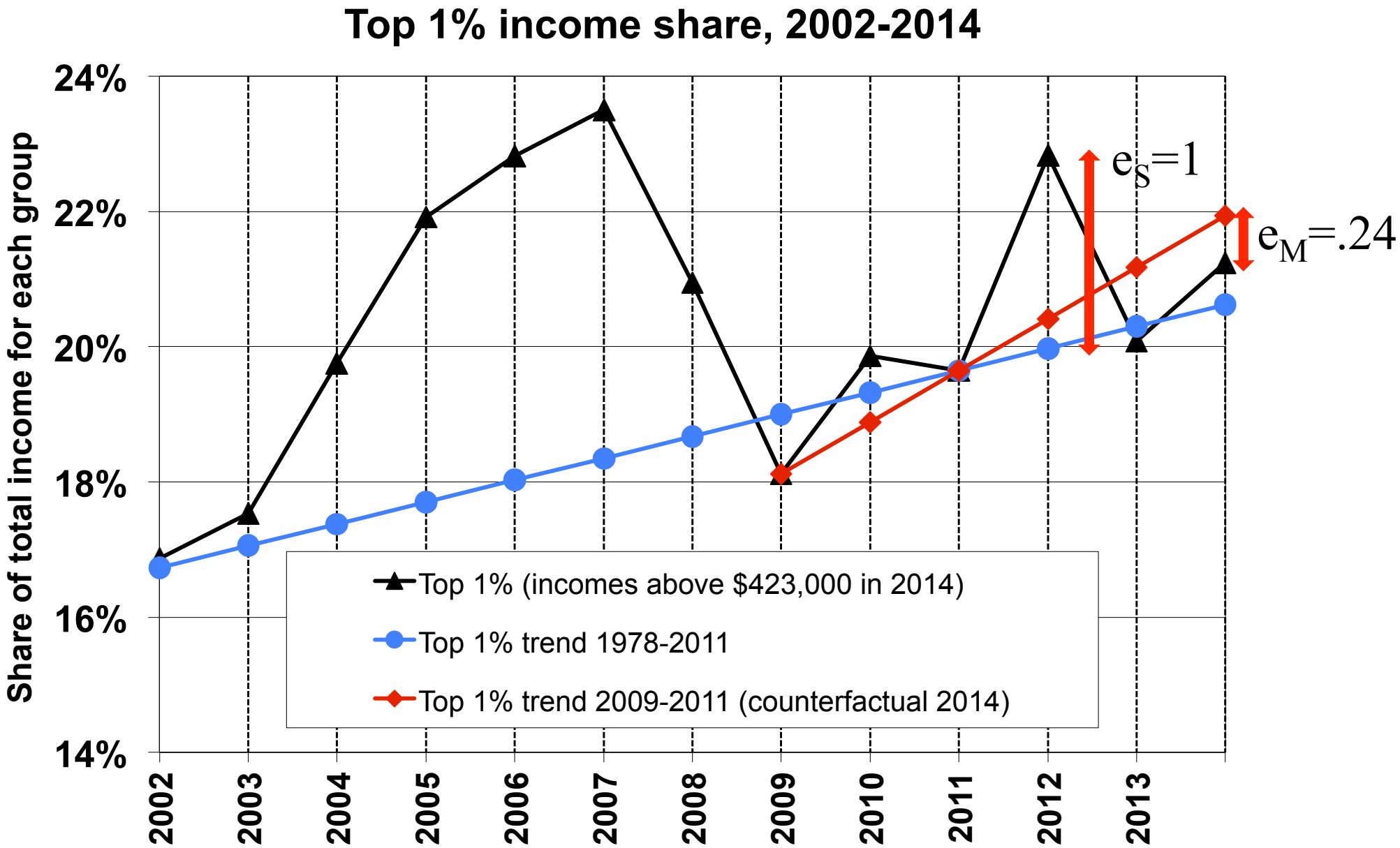

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MEDIUM-TERM ELASTICITY ESTIMATION

Top 1%: $sh_{2014} = 21.24\%$. Counterfactual: $sh^c_{2014} = sh_{2011} + 3 \times .76\% = 19.65\% + 3 \times .76\% = 21.94\%$

$e_M = \Delta \log sh / \Delta \log(1 - MTR) = \log(21.2/21.9)/(-.13) = .24$

Top 0.1%: $sh_{2014} = 10.26\%$. Counterfactual: $sh^c_{2014} = sh_{2011} + 3 \times .49\% = 9.27\% + 3 \times .49\% = 10.72\%$

$e_M = \Delta \log sh / \Delta \log(1 - MTR) = \log(10.3/10.7)/(-.13) = .33$

Top 1-0.1%: $sh_{2014} = 10.98\%$. Counterfactual: $sh^c_{2014} = sh_{2011} + 3 \times .28\% = 10.38\% + 3 \times .28\% = 11.22\%$

$e_M = \Delta \log sh / \Delta \log(1 - MTR) = \log(11.0/11.2)/(-.13) = .17$

Moderate e_M elasticities: in line with literature but substantial uncertainty on 2014 counterfactual

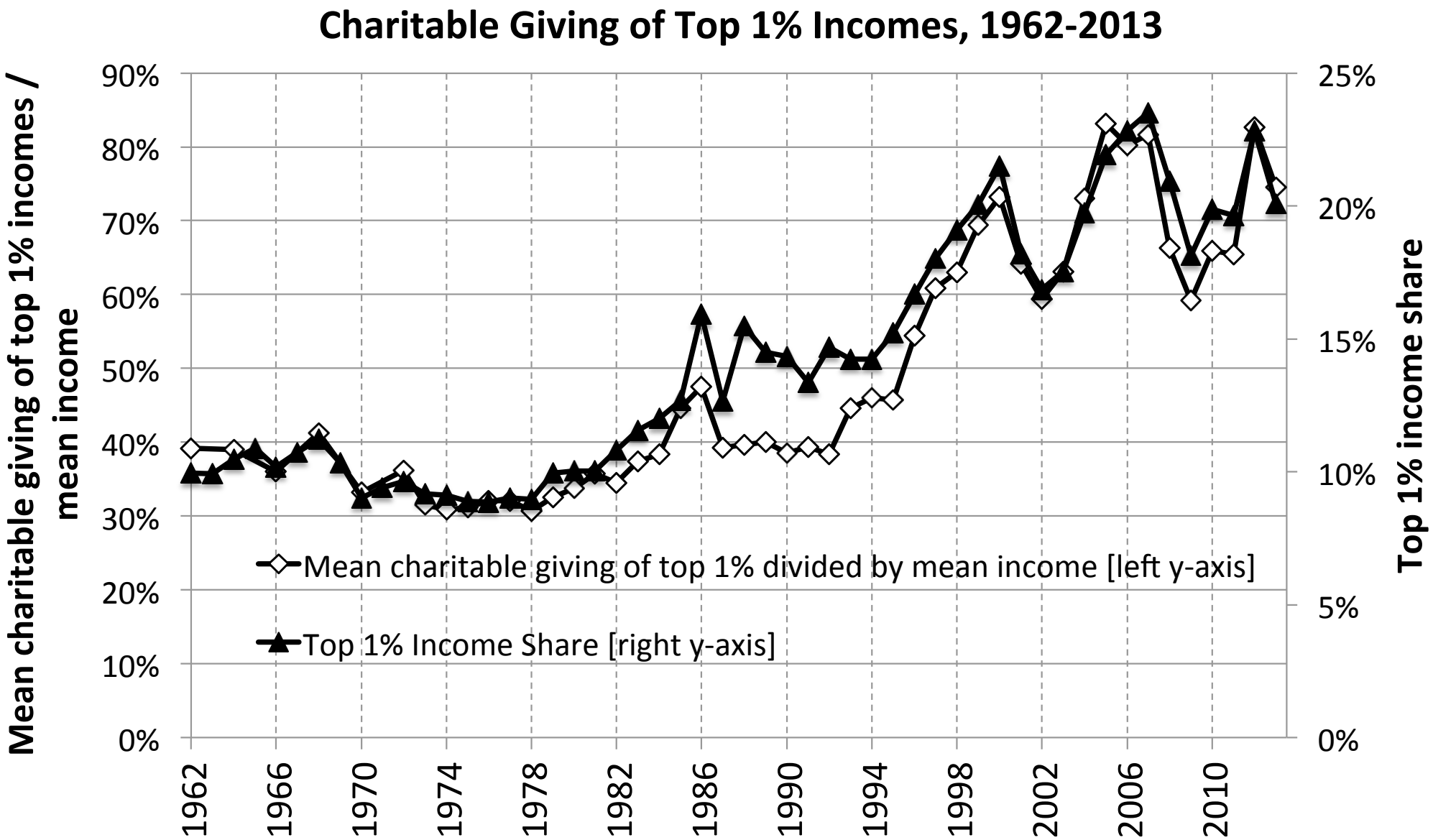
CHARITABLE GIVING

Charitable giving useful to tell apart tax avoidance driven changes from real changes in top incomes

Absent tax rate changes, top incomes and charitable giving at the top should move in **parallel**

With top tax rate increase, incentive to report less income but more charitable giving: top incomes and charitable giving at the top should move in **opposite** directions

In 2012, both top incomes and charitable giving went up: top earners did not postpone charitable giving to 2013



Source: The figure depicts average charitable giving of top 1% inomes (normalized by average income per family) on the left y-axis. For comparison, the figure reports the top 1% income share (on the right y-axis).

CONCLUSION

1) Results: 2013 reform shows clear evidence of income retiming (driven primarily by capital gains) with short-term retiming elasticity $e_S \simeq 1$

Medium term elasticity much smaller (perhaps $e_M \simeq 0.25$ but significant uncertainty)

With $e_S = 1$ and top rate tax reform every 10 years ('87, '93, '01, '13) $\Rightarrow$ Net extra elasticity is $e_S/10 = 0.1$ not negligible

2) Future work: Most interesting parameter is the long-term elasticity e_L

More years needed to assess whether top income share trend will be affected by 2013 higher rates