

The Politics of Widening Income Inequality in the United States, 1977 to 2014

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Introduction

French economist Thomas Piketty drew worldwide attention in 2013 with his book *Capital* in the Twenty-First Century and his argument that advanced capitalism inevitably produces widening inequality. His theory remains controversial, but the dramatic increase in income inequality in the United States is uncontested. In February 2017, Piketty and four colleagues (Facundo Alvaredo, Lucas Chancel, Emmanuel Saez, and Gabriel Zucman) issued a new study that documents this worsening income inequality by tracking the gap between the shares of national income flowing to the top one percent, the top 10 percent, the middle 40 percent, and the bottom 50 percent of adults from 1977 to 2014 in the United States and several other countries.²

Here, we focus on the starkest development, the changes in the shares of national income flowing to the bottom 50 percent and the top one percent of Americans from 1977 to 2014, on a pre-tax and post-tax basis.³ It is clear that income inequality worsened sharply over this period:

Table 1. Shares of U.S. Pre-Tax and Post-Tax National Income, Bottom 50 Percent and Top 1 Percent, in 1977 and 2014⁴

	Shares of Pre-	Tax Income	Shares of Pos	st-Tax Income
	1977	2014	1977	2014
Bottom 50 Percent	20.0%	12.5%	25.6%	19.4%
Top 1 Percent	10.7%	20.2%	8.6%	15.6%

- Over this period, the pre-tax share of national income claimed by the bottom 50 percent of adult Americans fell 7.5 percentage points or 37.5 percent; their post-tax income share declined substantially less, falling 6.2 percentage-points or 24.2 percent. (Table 1, above)
- At the same time, the pre-tax share of national income claimed by the top one percent of adult Americans rose 9.5 percentage-points or 88.8 percent while the same group's post-tax share increased moderately less, rising 7.0 percentage-points or by 81.4 percent

These aggregate data show, first, that the dominant change occurred in the distribution of pre-tax income, which clearly suggests that intensifying inequality has been driven principally by economic forces. On a pre-tax basis – before taking account of government policies that affect the

¹ I am grateful for the excellent research assistance provided by Siddhartha Aneja.

² Alvaredo, Facundo, Lucas Chancel, Thomas Piketty, Emmanuel Saez and Gabriel Zucman (2017). "Global Inequality Dynamics: New Findings from WID.WORLD." National Bureau of Economic Research. Working Paper 23119. February 2017. The data are found at: http://gabriel-zucman.eu/usdina/

³ Post-tax income takes account of federal taxes and transfer income, including social security, welfare, and support for health care and housing.

⁴ Inequality between the bottom 50 percent of adults and the top 10 percent also has widened sharply, but the top one percent account for more than three-fourths of the increase in the income share of the top 10 percent.

distribution of incomes -- the share of national income flowing to the bottom 50 percent of Americans fell dramatically while the share flowing to the top one percent rose equally dramatically. Government policies certainly affect how the economy operates over time. But our analysis will show that these stark changes in the distribution of pre-tax income are not associated with president or Congresses of a particular party. Rather, they largely reflect changes in the economy, especially globalization and the spread of new technologies, and their impact on the value of less-skilled adults, the wage premiums for skilled labor, and returns on capital.

Government actions have ameliorated those results to some degree, especially for the bottom 50 percent of Americans. Piketty and his colleagues included in pre-tax income all wages, salaries, employer contributions to payroll taxes, health and pension coverage, and capital income. Similarly, they measured post-tax income by taking account of all federal taxes and transfer payments, including social security, welfare and support for healthcare. In 2014, the bottom 50 percent's share of national income on a post-tax basis, at 19.4 percent, was 55.2 percent greater than their 12.5 percent 2014 share on a pre-tax basis. (Table 1, above) From 1977 to 2014, the bottom 50 percent's share of all pre-tax income fell 37.5 percent while its share of post-tax income fell 24.2 percent. This suggests that *federal tax and spending policies alleviated about one-third of the group's declining share of income on a pre-tax basis.* Government had less impact on the top one percent's growing share of national income: Their share of pre-tax income increased from 10.7 percent to 20.2 percent or 88.8 percent, while their share of post-tax income rose 81.4 percent. Federal tax and transfer policies alleviated just 8.3 percent of the top one percent's rising share of pre-tax national income.

Drawing on this analysis, we use a regression framework and additional statistical analysis to assess the relationships between the changing distribution of income and Democratic or Republican control of the White House and Congress. We found:

- There were no statistically significant relationships between changes in the shares of *pre-tax* income flowing to the bottom 50 percent or to the top one percent from 1978 to 2014 and the party of the President. (Appendix Tables A1, A2, A3 and A4) However, there were numerous statistically significant relationships between changes in the shares of *post-tax* income and the party of the President and/or the party that controlled Congress. (Appendix, all Tables)
- The bottom 50 percent's falling shares of post-tax income over the years 1978 to 2014 were on average 0.489 percentage points higher during Democratic presidencies (Carter, Clinton, and Obama) than during GOP presidencies (Reagan, Bush-1, and Bush-2), and therefore 0.489 percentage points lower during GOP presidencies than Democratic presidencies (Appendix, Tables A1 and A3)
- The top one percent's rising shares of post-tax income over this period were 0.385 percentage points higher, on average, during the GOP presidencies than during the Democratic presidencies, and 0.385 percentage points lower during the Democratic presidencies than during the GOP presidencies. (Tables A2 and A4)

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 $^{^{5}}$ 24.2 / 37.5 = 0.645.

- The bottom 50 percent's falling shares of all post-tax income from 1977 to 2014 were 0.514 percentage points higher, on average, when Democrats controlled Congress than when the GOP controlled Congress, and thus 0.514 percentage points lower when the GOP controlled Congress than when Democrats controlled it. (Tables A5 and A7)
- The top one percent's rising shares of post-tax income were 0.316 percentage-points higher, on average, in the years when Republicans controlled Congress, compared to when Democrats controlled Congress, *if and only if* we set aside or control for the party of the President. Similarly, the top one percent's rising shares of post-tax income were 0.316 percentage points lower, on average, when Democrats controlled Congress, compared to years when the GOP controlled Congress. (Table A6 and A8).
- When the GOP both controlled Congress and held the presidency, the bottom 50 percent's falling shares of post-tax income were 1.038 percentage points lower on average than when Democrats controlled both branches; similarly, the group's post-tax income share was 1.038 percentage points higher when Democrats controlled both branches than when the GOP did. (Tables A9 and A10)
- When the GOP both controlled Congress and held the presidency, the top one percent's rising shares of post-tax income were 0.804 percentage points higher on average than when Democrats controlled both branches; conversely, the group's post-tax income share was 0.804 percentage points lower when Democrats controlled both branches than when the GOP did. (Tables A11 and A12)

These results show that over this period of sharply increasing inequality, the bottom 50 percent of Americans lost more ground and the top one percent gained more ground during GOP presidencies; and the bottom 50 percent lost less ground and the top one percent gained less ground during Democratic presidencies. Further, the bottom 50 percent lost more ground, and the top one percent gained more ground, when the GOP controlled Congress than when Democrats did. The last finding, however, held only if we control or set aside the party of the President at the time.

The data also show that the party of the President and the party controlling Congress had a larger impact on the post-tax income shares of the bottom 50 percent than on those of the top one percent. Finally, the results show that the greatest impact on the bottom 50 percent's falling share of post-tax income and the top one percent's rising share of post-tax income occurred when Republicans or Democrats both held the presidency and controlled Congress.

A Thought Experiment of One Party Government

While independent economic developments have driven much of the changing distribution of income, manifest in the dramatic shifts in shares of pre-tax income, policies that moderated the declining share of income flowing to the bottom 50 percent and the rising share flowing to the top one percent occurred under both parties. In some cases, the business cycle dictated those policies: For example, all three Republican presidents served during serious recessions that triggered additional transfer payments to the bottom 50 percent, and two of the three Democratic presidents served during stock market booms that increased the income shares of the top one percent and

taxed those increases at preferential rates. The regression analysis takes account of all of these factors and measured the extent to which, all told, the policies of Democratic Presidents and Congresses moderated the widening inequalities in post-tax income more than the policies of GOP Presidents and Congresses – or, from a market perspective, the greater extent to which Republicans choose to accept the outcomes of economic forces, even when they sharply expand income inequalities, compared to Democrats. Table 2, below, uses the differences identified by the regressions to estimate the shares of post-tax income flowing to the bottom 50 percent and the top one percent in 2014 under a thought experiment in which each party held the presidency, controlled Congress or both over the entire period from 1977 to 2014. The results illustrate that the differences that the two parties have made in the changing distribution of post-tax income, compared to each other, are real and significant but not very large.

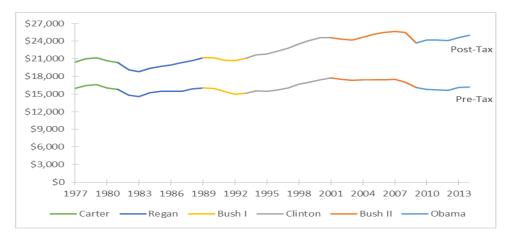
Table 2A: The Impact on Inequality if One Party Had Been In Charge from 1977 to 2014

	Post-Tax In	come Share,	Bottom 50%	Post-Tax Income Share, Top 1%			
Actual Share, 2014	19.4%			15.6%			
	President	President Congress Both			Congress	Both	
Democrats In Charge	19.6%	19.7%	19.9%	15.4%	15.4%	15.2%	
GOP In Charge	19.2%	19.1%	18.9%	15.8%	15.8%	16.0%	

Average Incomes of the Top One Percent and Bottom 50 Percent over this Period, by President

While the bottom 50 percent's share of national income declined sharply on both pre-tax and post-tax bases from 1977 to 2014, the group's average inflation-adjusted level of income remained steady on a pre-tax basis and rose on a post-tax basis. In 2014 dollars, the average pre-tax income of the bottom 50 percent rose from \$15,959 in 1977 to \$16,197 in 2014, or 1.5 percent over 37 years. Over the same period, the average post-tax income of this group increased from \$20,414 to \$25,045 or 22.7 percent. As Figure 1 below shows, the average post-tax income of the bottom 50 percent rose most substantially during Bill Clinton's presidency and steadily but less substantially during Barack Obama's first six years. By contrast, the group's average real post-tax income remained fairly flat under Jimmy Carter and George H. W. Bush, declined and then gained during Reagan's two terms, and rose and then fell under George W. Bush.

Figure 1: Average Pre-Tax and Post-Tax Income, Bottom 50 Percent, 1977-2014 (\$2014)



hThe average real income gains of the top one percent from 1977 to 2014 were much greater. In 2014 dollars, the average, pre-tax income of the top one percent rose from \$424,127 to \$1,304,771 or 207.6 percent (Figure 2, below), compared to the average 1.5 percent pre-tax gains of the bottom 50 percent. Similarly, the average real post-tax income of the top one percent rose from \$341,822 to \$1,010,903 or 195.7 percent, compared to 22.7 percent for the bottom 50 percent. The top one percent gained most during the rapid expansions of 1985 to 1989 (Reagan), 1994 to 2000 (Clinton), and 2003 to 2006 (Bush-2). These data suggest that the economic developments driving growing income inequality both slowed the income gains of the bottom 50 percent and increased those gains for the top one percent. The government's impact is also clear: The bottom 50 percent had significantly larger post-tax income gains as a result of government policies; but the government had less impact on the rapidly-rising incomes of the top one percent.

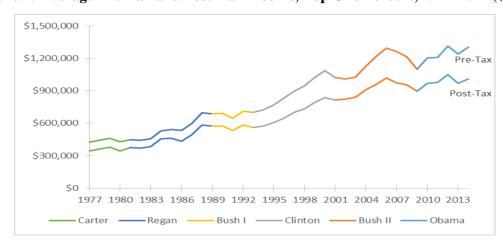


Figure 2: Average Pre-Tax and Post-Tax Income, Top One Percent, 1977-2014 (\$2014)

The Thought Experiment on One Party Government, Extended

We also can use the average income data to extend our thought experiment, applying our findings about the impact on incomes shares of the party that holds the presidency and/or controls the Congress to those income data. In this way, we can estimate the impact on the average incomes in 2014, and on cumulative income from 1977 to 2014, of the bottom 50 percent and the top one percent, if Democrats or Republicans had held the presidency, controlled Congress, and both each year over the entire period from 1977 to 2014, as compared to the party which actually held the presidency, controlled Congress or both in each year.

In particular, we applied the coefficients from the results of our regressions on the impact of Democrats or Republicans holding the presidency, controlling Congress, and both on the average income of the bottom 50 percent and the top one percent, using the average income data reported by Gabriel Zucman for the study by Piketty and his colleagues. For the thought experiment on the impact of Democratic control, for example, there is no effect in those years when Democrats already held the presidency, or controlled Congress, or both. Note, the regressions also provided coefficients for the relative differences in incomes when control of Congress was divided between the two parties, which we compared to the coefficients for Democratic or GOP control to derive the estimated impact. A summary of the results is presented in Table 3, below, and complete results are provided in Appendix B, Tables B1, B2, B3 and B4.

Table 3: The Impact on Incomes if One Party Had Been In Charge from 1977 to 2014 (\$ 2014)

	Post-Tax A	verage Incom	e, Bottom 50%	Post-Tax Average Income, Top 1%				
Actual Income, 2014		\$25,047			\$1,010,903			
	President	Congress	Both	President	Congress	Both		
Average Annual Difference, 1977 to 2014								
Democrats In Charge	+ \$276	+ \$276 +252 + \$528			- \$646	- \$14,226		
GOP In Charge	- \$245	- \$318	- \$563	+ \$12,068	+ \$15,961	+ \$28,029		
	(Cumulative Di	ifference, 1977 to	2014				
Democrats In Charge	+ \$10,215	+ \$10,215 + \$9,324 + \$19,539			- \$23,919	- \$526,373		
GOP In Charge	- \$9,078	- \$11,740	- \$20,848	+ \$446,551	+ \$590,575	+ \$1,037,086		

Based on the regression analysis and the terms of this thought experiment, we can estimate that single party control of the White House, Congress or both from 1977 to 2014 would have had very significant post-tax income effects. The impact on the average incomes of the top one percent are much greater, because the base for calculating the effects – the actual average income of the top one percent – is so much larger than the base for calculating the effects on the bottom 50 percent. This is a thought experiment based on terms — sustained one-party control of the presidency, Congress or both – not seen since the Reconstruction era. Nevertheless, it illustrates the impact of each party on the growing income inequality of this period. For example,

- Democratic control of the presidency throughout this period would have raised the average post-tax income of the bottom 50 percent by an average of \$276 per-year or \$10,215 over the entire period and lowered the average post-tax income of the top one percent on average by \$13,580 per-year and \$502,456 for the entire period.
- If Democrats had controlled both branches, the average post-tax income of the bottom 50 percent would have been, on average, \$563 higher per-year or \$19,539 more over the whole period -- and the average post-tax income of the top one percent would have been an average of \$14,226 less per-year and \$526,373 less over the period.
- GOP control of the presidency throughout this period would have raised the average post-tax income of the top one percent by an average of \$12,068 per-year and \$446,551 over the entire period and reduced the average income of the bottom 50 percent by an average of \$245 per-year and \$9,078 lower for the whole period.
- If the GOP had controlled both branches, the average post-tax income of the top one percent would have been, on average, \$28,029 higher per-year and \$1,037,086 more over the entire period and the average post-tax income of the bottom 50 percent would have been an average of \$563 lower per year and \$20,848 less for the whole period.

The Politics of Widening Inequality: The Impact of a Democratic or Republican President

The income shares of the bottom 50 percent and the top one percent each declined or increased, respectively, at different rates and at different times over this period, and therefore under different Presidents. In principle, those differences could be generally random or associated with a President's political party. So, we performed regression analysis on the income data to test the extent to which a President's party was associated with the direction and magnitude of the annual changes in the shares of all income flowing to the bottom 50 percent and top one percent. We tested four relationships to assess the association between Democratic and GOP Presidents, and,

- 1) The falling share of national income, pre-tax and post-tax, claimed by the bottom 50 percent, with a one-year lag; and
- 2) The rising share of national income, pre-tax and post-tax, claimed by the top one percent, with a one-year lag.

We ran the regressions with a one-year lag to account for the time between a President's actions and when the economic and income effects become manifest. We also ran the regressions without a one-year lag, and the results were similar. The analysis, therefore, is reasonably robust.

The complete results of our regressions are presented in Appendix A.

• First, the regressions found no statistically significant relationship between the President's political party and the changes in the pre-tax distribution of income shares: A President's political party does *not* explain the direction or magnitude of changes in the *pre-tax* distribution of income to the bottom 50percent an top one percent.

This is consistent with the view that independent economic forces generally determined the overall direction and magnitude of our increasing pre-tax income inequality from 1977 to 2014. This view is supported by the paths of pre-tax average income for the top one percent and bottom 50 percent across administrations, which generally follow business cycles. (Figures 1 and 2, above) The data also show that the decline in the bottom 50 percent's share of pre-tax income proceeded across the six administrations in a fairly steady fashion; and while the path of increases in the top one percent's share of pre-tax income is varied, those variations have no partisan pattern. (Figure 3, below) For example, the group's rising share of pre-tax income accelerated in Reagan's second term, throughout Clinton's terms, and from 2002 to 2006 under Bush-2.

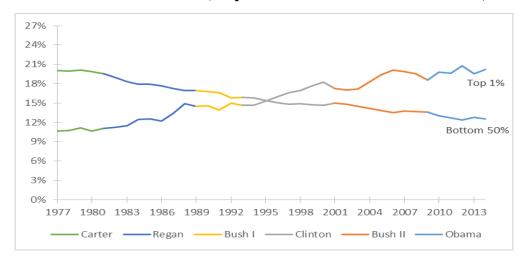


Figure 3. Shares of Pre-Tax Income, Top One Percent and Bottom 50 Percent, 1977-2014

The regression analysis did find a statistically-significant relationship (p<0.05) between a President's political party and the magnitudes and direction of the changes in the shares of *post-tax* income.

- Throughout this period, the shares of post-tax income flowing to the bottom 50 percent were 0.489 percentage points higher on average when Democrats held the White House (Carter, Clinton and Obama) than when Republicans held it (Reagan, Bush-1 and Bush-2). See Figure 4 below.
- Similarly, the shares of post-tax income claimed by the top one percent were 0.385 percentage points lower, on average, during Democratic administrations than during GOP administrations (p<0.05).
- The converse also is true: When Reagan, Bush-1 and Bush-2 were President, the bottom 50 percent's shares of post-tax income were 0.489 percentage points lower, on average, than under Carter, Clinton and Obama; and the top one percent's shares of post-tax income were 0.385 percentage points higher, on average, under the three GOP presidents than under the three Democratic presidents.

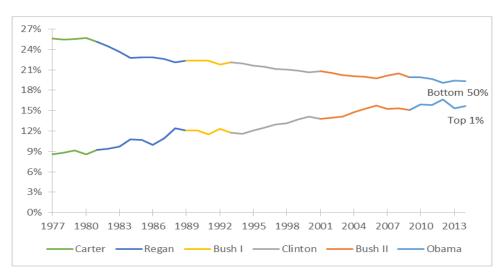


Figure 4. Shares of Post-Tax Income, Top One Percent and Bottom 50 Percent, 1977-2014

Thus, while independent economic forces drove up the top one percent's share of pre-tax income and depressed the bottom 50 percent's share, Democratic Presidents overall leaned against those forces by affecting the distribution of post-tax income, but Republican Presidents overall did not. However, Democratic Presidents did more to ameliorate the eroding income share of the bottom 50 percent than they did to temper the top one percent's rising income share.

Worsening Income Inequality, President by President

Using the same data on the paths of income shares, we next assessed the rates at which income inequality intensified under each President in this period. To do so, we first tracked the shares of pre-tax flowing to the bottom 50 percent and the top one percent at the beginning and end of each President's time in office. We then tracked the share of post-tax income flowing to each group at the beginning and end of each President's term in office, but with a one-year lag to recognize the gap between approval of tax and spending changes and the impact of those changes. The results are presented in Table 4, below.

Table 4: Changes in the Shares of Income Flowing to the Bottom 50 Percent and The Top 1 Percent of Americans, under Each President, 1977-2014

	Pre-Tax	Shares	Post-Ta	x Shares
	Bottom 50%	Top 1%	Bottom 50%	Top 1%
Carter	$20.0\% \rightarrow 19.5\%$	$10.7\% \rightarrow 11.0\%$	$25.5\% \rightarrow 24.5\%$	$8.8\% \to 9.4\%$
Reagan	19.5% → 16.9%	$11.0\% \rightarrow 14.5\%$	$24.5\% \rightarrow 22.4\%$	9.4% → 12.1%
Bush-1	16.9% →15.9%	$14.5\% \rightarrow 14.6\%$	$22.4\% \rightarrow 22.0\%$	12.1% → 11.6%
Clinton	$15.9\% \rightarrow 14.9\%$	$14.6\% \rightarrow 17.3\%$	$22.0\% \rightarrow 20.6\%$	11.6% → 13.9%
Bush-2	14.9% → 13.6%	$17.3\% \rightarrow 18.5\%$	20.6% → 19.9%	13.9% → 15.9%
Obama	13.6% → 12.5%	$18.5\% \rightarrow 20.2\%$	$19.9\% \rightarrow 19.4\%$	$15.9\% \rightarrow 15.6\%$

Over this period, the bottom 50 percent's share of pre-tax national income fell from 20.0 percent to 12.5 percent or 7.5 percentage-points, and the group's share of post-tax income fell from 25.5 percent to 19.4 percent or 6.1 percentage points. The top one percent's income share rose from 10.7 percent to 20.2 percent on a pre-tax basis or 9.5 percentage points, and their share of post-tax income rose from 8.8 percent to 15.6 percent or 6.8 percentage points. Using these data, we can assess how much of the total change in income distribution occurred under each President.

Table 5: Percentage of the Change in the Shares of National Income for the Bottom 50 Percent and Top 1 Percent under Each President, 1977-2014

	Pre-Tax	Shares		
	Bottom 50%	Top 1%	Bottom 50%	Top 1%
Carter	6.7%	3.2%	8.1%	10.0%
Reagan	34.7%	36.8%	45.2%	40.0%
Bush-1	13.3%	1.1%	3.2%	- 5.7%
Clinton	13.3%	28.4%	21.0%	30.0%
Bush-2	17.3%	12.6%	14.5%	18.6%
Obama	14.7%	17.9%	8.1%	7.1%
	Total Cor	ntribution	Total Cor	ntribution
GOP	65.3%	50.5%	62.8%	52.9%
Democrats	34.7%	49.5%	37.2%	47.1%

The overall results are presented in Table 5, above. From 1977 to 2014, the economic developments affecting the bottom 50 percent's falling share of pre-tax income occurred mainly during GOP administrations, while the developments affecting the top one percent's rising share of pre-tax income occurred about equally under GOP and Democratic Presidents. One factor here is the business cycle. Recessions occurred during the terms of all three GOP Presidents, putting downward pressure on the pre-tax income shares of the bottom 50 percent; and stock market booms occurred during Reagan and Clinton's presidencies, putting upward pressure on the pre-tax income shares of the top one percent. The same dynamic is evident in the post-tax income shares: A much larger percentage of the decline in the bottom 50 percent's share occurred under GOP Presidents than under Democrats, while the top one percent's rising share of post-tax income occurred nearly equally under GOP and Democratic administrations. This suggests that the economic

developments driving changes in the two groups' per-tax income shares also affect changes in their post-tax income shares.

Presidents and Their Political Parties Mattered for the Bottom 50 Percent of Americans

The years 1977 to 2014 cover six Presidents, 37 years and 9.25 presidential terms (including five years of Obama's presidency). If the decline in the bottom 50 percent's share of national income had proceeded on a steady basis with equivalent declines over each presidential term, each term would account for 10.8 percent of the total decline.⁶ However, the results show that a highly disproportionate percentage of the total decline in the bottom 50 percent's share of pre-tax income – 34.7 percent -- occurred under Reagan. Further, Reagan's policies amplified that development by raising payroll tax rates and the gas tax, and reducing income supports for poor households. As a result, 45.2 percent of the total decline in the group's post-tax share of income occurred during Reagan's two terms.

The bottom 50 percent's share of national income also declined during the other five presidencies of this period, and mostly at rates near or below the 10.8 percent per-term average. Strikingly, the three GOP Presidents presided over a slightly smaller percentage of the group's declining share of income on a post-tax basis than a pre-tax basis. This reflects increases in social safety-net spending in response to the serious recessions during the terms of the three GOP Presidents. Carter presided over the mild 1980 downturn; but the economy boomed during Clinton's two terms, and Obama mainly presided over a recovery from a deep recession that occurred mainly under Bush-2.

Turning to the other two GOP Presidents in this period, Bush-1 served one term, during which he presided over 13.3 percent of the total decline in the bottom 50 percent's share of pretax income but only 3.2 percent of the group's total decline in its share of post-tax income. This moderation on a post-tax basis reflects rising social safety net spending during the 1990-1991 recession, including unemployment insurance and food stamps, and the impact on the overall distribution of post-tax income from Bush's agreement to raise taxes on high income people. Bush-2 presided over 17.3 percent of the decline in the bottom 50 percent's share of pre-tax income but 14.5 percent of the group's decline in its share of post-tax income. Again, this moderation in the group's decline on a post-tax basis mainly reflects safety-net spending during the crippling recession in his final year as President and the benefits of Bush-2's tax cuts for those at the upper end of the bottom 50 percent.

Focusing now on the Democrats, the greatest part of the decline in the bottom 50 percent's income share during Democratic administrations occurred under Clinton. He served two terms or 21.6 percent of the period from 1977 to 2014, and the decline in the bottom 50 percent's share of post-tax income during his presidency represented just 21.0 percent of the group's total decline from 1977 to 2014. The long boom and sharply falling unemployment during Clinton's terms tempered the bottom 50 percent's pre-tax losses to 13.3 percent of the total decline in their share of pre-tax income. The larger decline in the group's share of post-tax income reflected the 1988 and 1990 increases in payroll tax rates enacted under Reagan and the Clinton administration's agreement to cut social spending in order to balance the budget. In addition, the stock market

⁶ Over the period from 1977 to 2014, Republicans held the White House 20 years, and Democrats held it 18 years.

boom and preferential tax treatment of its capital gains expanded the post-tax gains by the top one percent, squeezing the bottom 50 percent's income shares.

Of the two other Democratic Presidents in the years from 1977 to 2014, Carter served one term, and the economic forces depressing the bottom's 50 percent's income shares began to take hold while he held the office. As a result, only 6.7 percent of the decline in the group's share of pre-tax income occurred during his term, and only 8.1 percent of the decline in their share of post-tax income. The difference probably reflects payroll tax increases enacted earlier which took effect in 1978 and 1979. Obama, the third Democratic President in the period, served five years (2009-2014) in this period. The severe recession dominating the first six months of his first term and the ongoing problems with the financial and housing markets help explain why 14.7 percent of the decline in the bottom 50 percent's share of pre-tax income occurred during Obama first five years in office. But only 8.1 percent of the decline of the group's share of post-tax income occurred in Obama's first five years as President, reflecting the benefits of his 2009 stimulus program and healthcare reforms for low and moderate-income Americans.

The President's Political Party Has Mattered Less to the Top One Percent's Income Share

The President's political party played less of a role in the top one percent's growing share of national income from 1977 to 2014. To begin, just over half of the overall increase in the top one percent's share of all pre-tax income (50.5 percent) occurred during the three Republican administrations of this period, compared to just under half (49.5 percent) under the three Democratic Presidents. (Table 5 above) However, the difference between the percentage of the increase in the top one percent's post-tax income share under GOP and Democratic Presidents is somewhat greater - 52.9 percent versus 47.1 percent, respectively. Moreover, the regression analysis found that under the GOP presidencies of this period, the top one percent's share of post-tax income, on average, was 0.385 percentage points higher than during Democratic presidencies. Since the top one percent's share of pre-tax income rose so sharply over this period, and the top one percent's average income was so high, we found in our thought experiment that the President's party could increase or decrease that average income by \$12,068 to \$13,580 per year.

The biggest factor in the top one percent gains in this period was the strong growth and stock market booms of the 1980s and 1990s: More than two-thirds of the increase in the top one percent's share of pre-tax income (67.2 percent) occurred during the long expansions and bull markets that marked the Reagan and Clinton presidencies. (Table 5, above) While economic factors tilted the distribution of rewards towards the top in those decades, every administration is free to pursue policies that impede or reinforce those developments. Reagan reinforced the top one percent's pre-tax gains by cutting the top personal income tax rate from 70 percent to 50 percent in 1981 and then again from 50 percent to 28 percent in 1986. As a result, 40.0 percent of the top one percent's increased share of post-tax income occurred during Reagan's terms. By contrast, Clinton raised the top income tax rate from 31.0 percent to 39.6 percent. Nevertheless, the percentage of the total increase in the top one percent's share of income rose modestly from 28.4 percent on a pre-tax basis to 30.0 percent on a post-tax basis. The reason was an enhanced

role for capital gains: From Bush-1 to Clinton, capital gains' share of GDP doubled to 4.02 percent, and the average effective tax on those gains dropped from 22.9 percent to 21.7 percent.⁷

The shifting distribution of income in favor of the top one percent also was reinforced during the presidencies of Carter and Bush-2. This period of income inequality began in 1977, when Carter took office, and only 3.2 percent of the increase in the top one percent's share of pretax income occurred during his term. However, Carter cut capital gains and other taxes, and ultimately 10.0 percent of the increase in the group's share of post-tax income happened during his term. (Table 5 above) Similarly, only 12.6 percent of the increase in the top one percent's share of pre-tax income occurred during Bush-2's two terms. However, his 2001 tax cuts provided disproportionate benefits for high-income taxpayers, so that 18.6 percent of the increase in the top one percent's share of post-tax income occurred during his two terms.

The top one percent's rising share of income actually slowed during the two other presidencies in this period, Bush-1 and Obama. Recession dominated Bush-1's term, so only 1.1 percent of the increase in the group's share of pre-tax income occurred while he was President. Moreover, Bush-1's signature initiative to reduce budget deficits included serious tax increases for high-income Americans; and on top of the recession, the result was that the top one percent's share of post-tax income *declined* sufficiently to offset 5.7 percent of the group's increased share of post-tax income from 1977 to 2014. The top one percent's rising income share also moderated during Obama's first six years (2009 – 2014). The equity market's rapid recovery helped drive substantial gains in the top one percent's share of pre-tax income, equivalent to 17.9 percent of the group's total gains from 1977 to 2014. But Bush-2's tax cuts for high-income people expired and Obama imposed additional taxes on capital income to help finance his healthcare reforms, so only 7.1 percent of the top one percent's rising share of post-tax income occurred on his watch.

The Impact of Democratic or Republican Control of Congress on Widening Inequality

It is clear that spending and tax policies moderated the widening income inequalities of this period, especially for the bottom 50 percent of Americans. From 1977 to 2014, the share of pretax income flowing to the bottom 50 percent declined from 20.0 percent to 12.5 percent, or by 37.5 percent. After taking account of federal income transfers and taxes, the share of post-tax income flowing to the bottom 50 percent declined from 25.6 percent to 19.4 percent, or by 24.2 percent (Table 2, above). Our analysis further found that the decline in the bottom 50 percent's share of national income accelerated overall under GOP presidents, especially Ronald Reagan, and moderated overall under Democratic presidents. According to the regression analysis, when Democrats held the White House, the bottom 50 percent's share of post-tax national income, on average, was 0.489 percentage points higher than when Republicans were president. The analysis also found, as noted above, that the top one percent's share of post-tax income was an average of 0.385 percentage points higher in the years when Republicans held the White House than when Democrats did.

Next, we apply a similar same analysis to assess whether partisan control of Congress also has had a significant effect on the changing distribution of post-tax income. Control of Congress has three partisan outcomes: Control by Democrats, control by Republicans, and divided control (that is, one party controls the House of Representatives and the other party controls the Senate).

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⁷ Tax Policy Center. "Historical Capital Gains And Taxes" http://www.taxpolicycenter.org/statistics/historical-capital-gains-and-taxes.

Table 6, below, tracks the changes in the share of national income flowing to the bottom 50 percent and the top one percent on a pre-tax and a post-tax basis, by years of Democratic, Republican and divided control of Congress from 1977 to 2014.

Table 6: Changes in the Shares of National Income Flowing to the Bottom 50 Percent and the Top 1 Percent of Americans, by Periods of Party or Divided Control of Congress, 1977-2014

Party Control	Pre-	Tax	Post-	Tax
(Senate/House)	Bottom 50%	Top 1%	Bottom 50%	Top 1%
Dem/Dem (1977-81)	$20.0\% \rightarrow 19.5\%$	$10.7\% \rightarrow 11.0\%$	$25.6\% \rightarrow 25.1\%$	$8.6\% \rightarrow 9.3\%$
Dem/GOP (1981-87)	$19.5\% \rightarrow 17.2\%$	$11.0\% \rightarrow 13.3\%$	$25.1 \% \rightarrow 22.6\%$	$9.3\% \rightarrow 11.0\%$
Dem/Dem (1987-95)	$17.2\% \rightarrow 15.4\%$	$13.3\% \rightarrow 15.3\%$	$22.6 \% \rightarrow 21.6\%$	$11.0\% \rightarrow 12.0\%$
GOP/GOP (1995-01)	$15.4\% \rightarrow 14.9\%$	15.3% →17.3%	$21.6\% \rightarrow 20.8\%$	$12.0\% \rightarrow 13.8\%$
Dem/GOP (2001-03)	$14.9\% \rightarrow 14.5\%$	$17.3\% \rightarrow 17.2\%$	$20.8\% \rightarrow 20.2\%$	$13.8\% \rightarrow 14.1\%$
GOP/GOP (2003-07)	$14.5\% \rightarrow 13.7\%$	$17.2\% \rightarrow 19.9\%$	$20.2\% \rightarrow 20.1\%$	$14.1\% \rightarrow 15.3\%$
Dem/Dem (2007-11)	$13.7\% \rightarrow 12.7\%$	$19.9\% \rightarrow 19.6\%$	20.1% →19.6%	$15.3\% \rightarrow 15.8\%$
GOP/Dem (2011-14)	$12.7\% \rightarrow 12.5\%$	$19.6\% \rightarrow 20.2\%$	$19.6\% \rightarrow 19.4\%$	$15.8\% \rightarrow 15.6\%$

Next, we calculated the percentage of the entire period that each party controlled Congress and when control was divided, and how much of the decline in the bottom 50 percent's share of national income and how much of the increase in the one percent's share of national income occurred during Democratic, Republican and divided control of Congress. The results are presented in Table 7.

Table 7: Changes in the Shares of National Income Flowing to the Bottom 50 Percent And the Top 1 Percent, by Periods of Party or Divided Control of Congress, 1977-2014

	Pre-Tax	Shares	Post-Tax	Shares	Share of Period			
	Bottom 50%	Top 1%	Bottom 50%	Top 1%	(1977-2015)			
Party Control of Congress (House/Senate)								
Dem/Dem	44.0%	21.1%	31.1%	31.4%	16 years: 42.1%			
GOP/GOP	16.0%	49.5%	14.8%	42.9%	10 years: 26.3%			
Divided	40.0%	29.5%	54.1%	25.7%	12 years: 31.6%			

By themselves, these data suggest that Democratic control of Congress was accompanied by a moderation in the bottom 50 percent's declining share of national income and an *acceleration* of the top one percent's rising share of income: 44.0 percent of the decline in the bottom 50 percent's share of pre-tax income occurred while Democrats controlled Congress, but only 31.1 percent of the decline in their share of post-tax income occurred during Democratic congresses. However, 21.1 percent of the increase in the top one percent's share of pre-tax income occurred while Democrats controlled Congress, and 31.4 percent of the increase in their share of post -tax income occurred in the same years.

By the same metric, GOP control of Congress was accompanied by much smaller differences in the bottom 50 percent's falling share of national income on a pre-tax and post-tax basis, 16.0 percent and 14.8 percent, respectively. GOP control of Congress also was accompanied by a very large increase in the share of pre-tax income flowing to the top one percent – 49.5 percent

of the group's total gains on a pre-tax basis occurred during the 10 years of the period when the GOP controlled Congress. However, the tax and spending policies adopted in those 10 years *moderated* the top one percent's rising share of national income on a post-tax basis, to 42.9 percent respectively. Finally, the data show that divided control of Congress was accompanied by a disproportionate percentage of the bottom 50 percent's declining share of national income on a post-tax basis (54.1 percent).

To refine the results, we conducted regression analysis assessing the extent to which control of Congress by Democrats, Republicans or divided control was associated with the direction and magnitude of annual changes in the shares of post-tax income flowing to the bottom 50 percent and top one percent. We controlled these regressions for the President's political party, so we could focus clearly on any relationship between a party's control of Congress and the widening income inequality of this period. Finally, we also tested the relationship between one party in control of Congress and holding the presidency, and the widening inequality.

Therefore, we tested a series of relationships to assess the impact of Democratic and Republican control of Congress on,

- 1) The falling share of national income, pre-tax and post-tax, claimed by the bottom 50 percent, with a one-year lag, controlling and not controlling for the President's party;
- 2) The falling share of national income, pre-tax and post-tax, claimed by the bottom 50 percent, with a one-year lag, when the party that controls Congress also holds the presidency;
- 3) The rising share of national income, pre-tax and post-tax, claimed by the top one percent, with a one-year lag, controlling and not controlling for the President's party; and
- 4) The rising share of national income, pre-tax and post-tax, claimed by the top one percent, when the party that controls Congress also holds the presidency.

The complete results of these regressions are presented in the Appendix, Tables A5, A6, A7 and A8.

The results are very similar to the results of our analysis of the relationship between a President's political party and the changing distribution of post-tax income. In brief, Democratic control of Congress was accompanied by a moderation in the decline of the bottom 50 percent's share of post-tax income, as GOP control was accompanied by an acceleration in that decline. Further, Democratic or Republican control of Congress had a more modest but statistically significant effect on the top one percent's rising share of post-tax income, when we also controlled for the President's party. The regressions also found evidence of differences in the distribution of post-tax income to the bottom 50 percent and the top one percent between one-party control of Congress and divided party control of Congress.

The results also suggest that when one party both controls the Congress and holds the presidency, the party's impact on the bottom 50 percent's declining share of post-tax income is roughly twice as great as its impact when the party controls only the Congress or only the presidency. Democratic control of Congress coupled with a Democratic President was accompanied by significant moderations in the top one percent's rising share of post-tax income and the bottom 50 percent falling share, as Republican control of Congress coupled with a GOP President was accompanied by a significant acceleration in share of post-tax income flowing to the top one percent and a significant reduction in the share flowing to the bottom 50 percent.

Turning to the quantitative results, we will focus on changes in the distribution of *post-tax* income, based on the view that independent economic forces largely determined the direction and magnitude of income inequality on a pre-tax basis. We note, however, that while the regressions found no statistically-significant relationships between partisan control of the presidency and the changing distribution of pre-tax income, they did report a statistically significant association between the changing distribution of pre-tax income and partisan control of Congress. This findings mainly reflects the particular economic conditions of the two brief periods when Republicans controlled both houses of Congress (1995 to 2000 and 2003 to 2006). Both were periods when equity markets outperformed their historic averages: From 1977 to 2014, the annual return on the S&P 500 averaged 12.52 percent; but those returns averaged 22.2 percent per-year from 1995 to 2000 and 14.9 percent per-year from 2003 to 2006.⁸ As noted earlier, very strong bull markets exacerbate income inequality, because stocks are owned disproportionately by higher-income people.

Next, we turn to the statistically significant relationship between partisan control of Congress and the magnitude and direction of the changes in the shares of post-tax income flowing to the bottom 50 percent reported by the regression analysis.

- Compared to the years when Democrats controlled Congress, when Republicans controlled Congress in the period from 1977 to 2014, the shares of post-tax income flowing to the bottom 50 percent, on average, were 0.514 percentage points lower (p<0.01) than in the years when Democrats controlled Congress.
- Further, the shares of post-tax income flowing to the bottom 50 percent, on average, were 0.378 percentage points lower when control of Congress was divided, as compared to when Democrats controlled Congress (p<0.1).
- Similarly, in the years when Democrats controlled Congress in this period, the shares of post-tax income flowing to the bottom 50 percent on average were 0.514 percentage points higher than the years when Republicans controlled Congress (p<0.01). (Table A7)
- Compared to the years when Republicans controlled Congress, when control of Congress was divided, the differences in the shares of income flowing to the bottom 50 percent were not statistically significant. (Table A7)

The regressions also found a statistically significant relationship between partisan control of Congress and the magnitude of the changes in the shares of post-tax income flowing to the top one percent of Americans.

• When Republicans controlled Congress in this period, the top one percent's shares of post-tax income were an average of 0.289 percentage points higher than when Democrats controlled Congress; but this result was not statistically significant at the 10 percent level. (Table A6)

⁸ "Annual Returns on Stock, T. Bonds and T. Bills: 1928 – Current." http://pages.stern.nyu.edu/~adamodar/New Home Page/datafile/histretSP.html

- However, when we controlled for the President's party at the time, when Republicans controlled Congress, the top one percent's shares of post-tax income were an average of 0.316 percentage points higher than when Democrats controlled Congress, and the result was statistically significant (p<0.1). (Table A6)
- Similarly, controlling for the President's party at the time, the top one percent's shares of post-tax income were on average 0.316 percentage points lower when Democrats controlled Congress, than when the GOP controlled Congress (p<0.1). (Table A8)

The regressions also found a statistically significant relationship between changes in the top one percent's share of post-tax income and divided control of Congress.

- Compared to the years when the Republicans controlled the Congress, when control of Congress was divided in this period, the shares of post-tax income flowing to the top one percent, on average, were 0.460 percentage points lower (p<0.05). (Table A8)
- Compared to the years when the Democrats controlled Congress, when control of Congress was divided, the differences in the shares of income flowing to the top one percent were not statistically significant. (Table A6)

The regression analyses on the party of the presidency and congressional control found that post-tax income inequality lessened when Democrats control either branch, compared to when Republicans control either branch. When we test for the association between either party both holding the presidency and controlling the Congress at the same time, and changes in the shares of post-tax income flowing to the bottom 50 percent, the differences are both additive and statistically significant.

- When Democrats held the presidency and controlled Congress in the years from 1977 to 2014, the shares of post-tax income flowing to the bottom 50 percent were on average 1.038 percentage points higher than when the GOP controlled both branches. (p<0.01)
- Similarly, when Republicans both held the presidency and controlled Congress in this period, shares of post-tax income flowing to the bottom 50 percent were on average 1.038 percentage points lower than when Democrats controlled both branches. (p<0.01)

One party in control of both the White House and Congress during this period was associated with a smaller but significant effect on the share of post-tax income flowing to the top one percent.

- Compared to years when Democrats controlled both branches of government, the top one percent's shares of post-tax income were on average 0.804 percentage-points higher when Republicans both held the presidency and controlled Congress (p<0.01). (Table A12)
- Conversely, compared to years when the GOP controlled both branches, the top one percent's shares of post-tax income were on average 0.804 percentage points lower when Democrats both held the presidency and controlled Congress (p<0.01). (Table A12)
- Strikingly, the top one percent's shares of post-tax income were on average 1.027 percentage-points lower when Democrats held the presidency and control of Congress

was divided, compared to years when the GOP controlled both branches (p<0.01). (Table A11)

All of our analysis suggest that partisanship -- the party that holds the presidency and the party that controls Congress – has affected the widening post-tax income inequalities of this period. Moreover, the impact of the two branches on post-tax inequality is not collinear. Rather, the associations between changes in post-tax inequality and the party holding the presidency and changes in post-tax inequality and the party controlling Congress are independent of each other.

Conclusions

Income inequality in the United States has worsened dramatically since 1977. The data compiled by Gariel Zucman and analyzed by Thomas Piketty and his colleagues confirm that in the United States, the top one percent's share of national income increased sharply on both a pretax and post-tax basis from 1977 to 2014, and that the pre-tax and post-tax shares of income flowing to the less prosperous half of Americans, reaching from the poor to the middle class, declined sharply over the same years. (Here, "post-tax" income takes account of government transfers as well as taxes.) From 1977 to 2014, the shares of pre-tax income flowing to the top one percent jumped from 10.7 percent to 20.2 percent, and the pre-tax shares flowing to the bottom 50 percent declined from 20.0 percent to 12.5 percent. Over the same years, the shares of post-tax income flowing to the top one percent increased from 8.6 percent to 15.6 percent, and the post-tax shares flowing to the bottom 50 percent fell from 25.6 percent to 19.4 percent.

These data show that the share of national income flowing to the top one percent of Americans increased 88.8 percent on a pre-tax basis and 81.4 percent on a post-tax basis, while the share flowing to the bottom 50 percent of Americans fell 37.5 percent on a pre-tax basis and 24.2 percent on a post-tax basis. Therefore, the rate at which the top one percent's share of pre-tax income increased was much higher than the rate at which the bottom 50 percent's share declined. This suggests that the economic forces expanding the income share of the top one percent, such as rising returns on capital and advanced skills, have been stronger than the forces depressing the income share of the bottom 50 percent, such as job losses from globalization and the impact of new technologies on the wages of lesser-skilled workers. It is also evident that the bottom 50 percent's share of post-tax income is larger than its share of pre-tax income, while the top one percent's share of pre-tax income is larger than its share of post-tax income. This tells us that on balance, federal tax and transfer policies have moderated both the bottom 50 percent's declining share of income and the top one percent's rising share of income.

In this study, we examined these developments for evidence of partisan effects: Is there a meaningful and statistically significant association between the President's political party and/or the political party that controls Congress and the changing distribution of pre-tax or post-tax income? We tested these propositions by performing regression analysis on these variables. Consistent with our view that economic factors have driven widening income inequalities on a pre-tax basis, these regressions found that the political party holding the White House or controlling the Congress did *not* explain the changing distribution of pre-tax income for either the top one percent or the bottom 50 percent. The analysis further found that the President's political party and the party controlling Congress did affect the changing distribution of *post-tax* income to some degree. On average, the decline in the bottom 50 percent's share of post-tax income moderated under Democratic Presidents and Democratic congresses, and intensified under

Republican presidents and Republican congresses. Similarly, the top one percent's share of post-tax income increased somewhat more under Republican Presidents than Democratic Presidents, and somewhat more when Republicans controlled Congress than when Democrats did.

These findings also were generally consistent with additional statistical analysis, especially regarding the impact of the President's political party. We allocated the total changes in the shares of national income flowing to the top one percent and the bottom 50 percent, on both a pre-tax and post-tax basis, across the six presidencies from 1977 to 2014. Again, there was no evidence that a President's party affected the changing distribution of pre-tax income. Comparable statistical changes in the shares of pre-tax income flowing to the bottom 50 percent occurred under Bush-1, Clinton, Bush-2 and Obama; and statistically similar changes in the shares of pre-tax income flowing to the top one percent occurred under Carter and Bush-1 and under Bush-2 and Obama.

The statistical analysis also found that post-tax income inequality worsened most dramatically during Reagan's presidency. The most important factors were the economic forces driving changes in the distribution of pre-tax income: 34.7 percent of the total decline in the bottom 50 percent's share of pre-tax income from 1977 to 2014 and 36.8 percent of the total increase in the top one percent's share of that pre-tax income happened during Reagan's two terms. Furthermore, tax and transfer changes under Reagan reinforced both developments: 45.2 percent of the total decline in the bottom 50 percent's share of post-tax income and 40.0 percent of the top one percent's rising share of post-tax income occurred during the Reagan administrations.

Based on these data and analyses, there is strong evidence that the party of the President and the party controlling Congress have significantly affected the pace and extent of the widening income inequality of this period.

Appendix A

The Impact of the President's Party

Table A1: Regression Results, Relationship between a Democratic President in Office and The Bottom 50 Percent's Falling Share of National Income, 1978-2014 (One year lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Democrat	β S.E.	-0.459 (0.776)	0.123 (0.163)	-0.063 (0.098)	0.020 (0.642)	0.489** (0.185)	0.290** (0.117)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time	e trend	No	Yes	Yes	No	Yes	Yes
Quadratic t	time trend	No	No	Yes	No	No	Yes
Observatio	ons	37	37	37	37	37	37

Notes: Robust standard errors shown in parentheses (*** p<0.01, ** p<0.05, * p<0.1). Democrat takes value of 1 if the presidency was held by a Democrat in the prior year.

Table A2: Regression Results, Relationship between a Democratic President in Office and The Top One Percent's Rising Share of National Income, 1978-2014 (One year lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Democrat	β S.E.	0.718 (1.079)	-0.103 (0.225)	0.035 (0.229)	0.220 (0.800)	-0.385** (0.157)	-0.318** (0.155)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time	e trend	No	Yes	Yes	No	Yes	Yes
Quadratic t	ime trend	No	No	Yes	No	No	Yes
Observatio	ns	37	37	37	37	37	37

Table A3: Regression Results, Relationship between a Republican President in Office and The Bottom 50 Percent's Falling Share of National Income, 1978-2014 (One Year Lag)

	(1)	(2)	(3)	(4)	(5)	(6)
Republican β S.E.	0.459 (0.776)	-0.123 (0.163)	0.063 (0.098)	-0.020 (0.642)	-0.489** (0.185)	-0.290** (0.117)
Timing	Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls Linear time trend Quadratic time trend	No No	Yes No	Yes Yes	No No	Yes No	Yes Yes
Observations	37	37	37	37	37	37

Table A4: Regression Results, Relationship between a Republican President in Office and The Top One Percent's Rising Share of National Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Republican	β S.E.	-0.718 (1.079)	0.103 (0.225)	-0.035 (0.229)	-0.220 (0.800)	0.385** (0.157)	0.318** (0.155)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time tr	rend	No	Yes	Yes	No	Yes	Yes
Quadratic tim	ne trend	No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

The Impact of the Party that Controls Congress

Table A5: Regression Results, Relationship between Republican Control of Congress and The Bottom 50 Percent's Falling Share of National Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	-0.507 (0.987)	0.005 (0.157)	0.046 (0.151)	-0.777 (0.774)	-0.378* (0.213)	-0.259 (0.185)
Single-Party (R)	β S.E.	-1.967*** (0.650)	-0.298* (0.160)	-0.307* (0.178)	-1.816*** (0.545)	-0.514*** (0.150)	-0.542*** (0.179)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time trend		No	Yes	Yes	No	Yes	Yes
Control for Pres. Party		No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

Notes: Robust standard errors shown in parentheses (*** p<0.01, ** p<0.05, * p<0.1). Congressional control by Republicans and divided control are compared to single party control by Democrats.

Table A6: Regression Results, Relationship between Republican Control of Congress and The Top One Percent's Rising Share of National Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	0.373 (1.369)	-0.336* (0.194)	-0.407* (0.224)	0.357 (1.015)	-0.172 (0.209)	-0.289 (0.220)
Single-Party (R)	β S.E.	3.139*** (0.903)	0.827*** (0.224)	0.843*** (0.217)	2.013*** (0.707)	0.289 (0.184)	0.316* (0.168)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time trend		No	Yes	Yes	No	Yes	Yes
Control for Pres. Party		No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

Table A7: Regression Results, Relationship between Democratic Control of Congress and The Bottom 50 Percent's Falling Share of National Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	1.460* (0.785)	0.302** (0.143)	0.353** (0.158)	1.039* (0.602)	0.136 (0.157)	0.284 (0.169)
Single-Party (D)	β S.E.	1.967*** (0.650)	0.298* (0.160)	0.307* (0.178)	1.816*** (0.545)	0.514*** (0.150)	0.542*** (0.179)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls Linear time trend Control for Prog. Porty		No No	Yes No	Yes Yes	No No	Yes	Yes Yes
Control for Pres. Party Observations		No 37	37	37	No 37	No 37	37

Table A8: Regression Results, Relationship between Democratic Control of Congress and The Top One Percent's Rising Shares of National Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	-2.766** (1.201)	-1.163*** (0.222)	-1.251*** (0.243)	-1.656* (0.879)	-0.460** (0.215)	-0.605** (0.221)
Single-Party (D)	β S.E.	-3.139*** (0.903)	-0.827*** (0.224)	-0.843*** (0.217)	-2.013*** (0.707)	-0.289 (0.184)	-0.316* (0.168)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls Linear time trend Control for Pres. Party		No No	Yes No	Yes Yes	No No	Yes No	Yes Yes
Observations		37	37	37	37	37	37

The Impact of One Party Holding the Presidency and Controlling Congress.

Table A9: Regression Results, Relationship between GOP Control of Congress, GOP Presidencies, and the Bottom 50 Percent's Falling Share of Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	-0.507 (0.987)	0.005 (0.157)	0.046 (0.151)	-0.777 (0.774)	-0.378* (0.213)	-0.259 (0.185)
Single-Party (R)	β S.E.	-1.967*** (0.650)	-0.298* (0.160)	-0.307* (0.178)	-1.816*** (0.545)	-0.514*** (0.150)	-0.542*** (0.179)
Presidential Party (R)		-	-	-0.170 (0.161)	-	-	-0.496*** (0.172)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time trend		No	Yes	Yes	No	Yes	Yes
Control for Pres. Party		No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

Notes: Robust standard errors robust shown in parentheses (*** p<0.01, ** p<0.05, * p<0.1). Congressional control by is compared to single party control by democrats.

Table A10: Regression Results, Relationship between Democratic Control of Congress, Democratic Presidents, and the Bottom 50 Percent's Falling Share of Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	1.460* (0.785)	0.302** (0.143)	0.353** (0.158)	1.039* (0.602)	0.136 (0.157)	0.284 (0.169)
Single-Party (D)	β S.E.	1.967*** (0.650)	0.298* (0.160)	0.307* (0.178)	1.816*** (0.545)	0.514*** (0.150)	0.542*** (0.179)
Presidential Party (D)	β S.E.	-	-	0.170 (0.161)	-	-	0.496*** (0.172)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls Linear time trend Control for Pres. Party		No No	Yes No	Yes Yes	No No	Yes No	Yes Yes
Observations		37	37	37	37	37	37

Table A11: Regression Results, Relationship between GOP Control of Congress, GOP Presidencies, and the Top One Percent's Rising Share of Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β	0.373	-0.336*	-0.407*	0.357	-0.172	-0.289
Split	S.E.	(1.369)	(0.194)	(0.224)	(1.015)	(0.209)	(0.220)
Circle Device (D)	0	2 120***	0.027***	0.042***	2.012***	0.200	0.216*
Single-Party (R)	β S.E.	3.139*** (0.903)	0.827*** (0.224)	0.843*** (0.217)	2.013*** (0.707)	0.289 (0.184)	0.316* (0.168)
				0.205			O 400444
Presidential Party (R)		-	-	0.295 (0.189)	-	-	0.488*** (0.168)
Timin.		D	D	Dua 4 a	D4 4	D4 4	David dava
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time trend		No	Yes	Yes	No	Yes	Yes
Control for Pres. Party		No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

Table A12: Regression Results, Relationship between Democratic Control of Congress, Democratic Presidencies, and the Top One Percent's Rising Share of Income, 1978-2014 (One Year Lag)

		(1)	(2)	(3)	(4)	(5)	(6)
Split	β S.E.	-2.766** (1.201)	-1.163*** (0.222)	-1.251*** (0.243)	-1.656* (0.879)	-0.460** (0.215)	-0.605** (0.221)
Single-Party (D)	β S.E.	-3.139*** (0.903)	-0.827*** (0.224)	-0.843*** (0.217)	-2.013*** (0.707)	-0.289 (0.184)	-0.316* (0.168)
Presidential Party (D)	β S.E.	-	-	-0.295 (0.189)	-	-	-0.488*** (0.168)
Timing		Pre-tax	Pre-tax	Pre-tax	Post-tax	Post-tax	Post-tax
Controls							
Linear time trend		No	Yes	Yes	No	Yes	Yes
Control for Pres. Party		No	No	Yes	No	No	Yes
Observations		37	37	37	37	37	37

Appendix B: The Thought Experiment on One Party Control

Table B1: Average Income of the Bottom 50 Percent If Democrats Held the Presidency, Controlled the Congress, and Both, 1977-2014 (\$ 2014)

Year	Average	Presi	dent	Cong	ress	Bot	th
	Income	Income	Benefit	Income	Benefit	Income	Benefit
1978	\$21,015	\$21,015	\$0	\$21,015	\$0	\$21,015	\$0
1979	\$21,161	\$21,161	\$0	\$21,161	\$0	\$21,161	\$0
1980	\$20,647	\$20,647	\$0	\$20,647	\$0	\$20,647	\$0
1981	\$20,354	\$20,354	\$0	\$20,354	\$0	\$20,354	\$0
1982	\$19,163	\$19,551	\$389	\$19,366	\$203	\$19,754	\$591
1983	\$18,815	\$19,210	\$395	\$19,021	\$206	\$19,416	\$601
1984	\$19,356	\$19,778	\$421	\$19,576	\$220	\$19,998	\$641
1985	\$19,742	\$20,170	\$429	\$19,965	\$224	\$20,394	\$653
1986	\$19,958	\$20,391	\$433	\$20,184	\$226	\$20,617	\$659
1987	\$20,355	\$20,801	\$446	\$20,588	\$233	\$21,034	\$679
1988	\$20,722	\$21,187	\$465	\$20,722	\$0	\$21,187	\$465
1989	\$21,200	\$21,671	\$471	\$21,200	\$0	\$21,671	\$471
1990	\$21,209	\$21,680	\$471	\$21,209	\$0	\$21,680	\$471
1991	\$20,758	\$21,219	\$461	\$20,758	\$0	\$21,219	\$461
1992	\$20,671	\$21,141	\$470	\$20,671	\$0	\$21,141	\$470
1993	\$21,113	\$21,587	\$474	\$21,113	\$0	\$21,587	\$474
1994	\$21,681	\$21,681	\$0	\$21,681	\$0	\$21,681	\$0
1995	\$21,830	\$21,830	\$0	\$21,830	\$0	\$21,830	\$0
1996	\$22,289	\$22,289	\$0	\$22,853	\$564	\$22,853	\$564
1997	\$22,788	\$22,788	\$0	\$23,372	\$584	\$23,372	\$584
1998	\$23,578	\$23,578	\$0	\$24,185	\$607	\$24,185	\$607
1999	\$24,085	\$24,085	\$0	\$24,710	\$625	\$24,710	\$625
2000	\$24,560	\$24,560	\$0	\$25,205	\$646	\$25,205	\$646
2001	\$24,628	\$24,628	\$0	\$25,271	\$643	\$25,271	\$643
2002	\$24,327	\$24,914	\$587	\$24,634	\$306	\$25,221	\$893
2003	\$24,196	\$24,789	\$593	\$24,505	\$310	\$25,099	\$903
2004	\$24,674	\$25,284	\$610	\$25,340	\$666	\$25,950	\$1,276
2005	\$25,149	\$25,773	\$624	\$25,831	\$682	\$26,455	\$1,306
2006	\$25,506	\$26,145	\$640	\$26,205	\$699	\$26,844	\$1,338
2007	\$25,640	\$26,271	\$631	\$26,330	\$690	\$26,961	\$1,321
2008	\$25,486	\$26,103	\$617	\$25,486	\$0	\$26,103	\$617
2009	\$23,682	\$24,272	\$589	\$23,682	\$0	\$24,272	\$589
2010	\$24,162	\$24,162	\$0	\$24,162	\$0	\$24,162	\$0
2011	\$24,232	\$24,232	\$0	\$24,232	\$0	\$24,232	\$0
2012	\$24,083	\$24,083	\$0	\$24,411	\$327	\$24,411	\$327
2013	\$24,613	\$24,613	\$0	\$24,941	\$328	\$24,941	\$328
2014	\$25,047	\$25,047	\$0	\$25,382	\$335	\$25,382	\$335
Total	\$832,475	\$842,691	\$10,215	\$841,799	\$9,324	\$852,015	\$19,539

Table B2: Average Income of the Top One Percent If Democrats Held the Presidency, Controlled Congress, and Both, 1977-2014 (\$ 2014)

Year	Average	Presido	ent	Congre	ess	Both	ı
	Income	Income	Cost	Income	Cost	Income	Cost
1978	\$362,264	\$362,264	\$0	\$362,264	\$0	\$362,264	\$0
1979	\$377,450	\$377,450	\$0	\$377,450	\$0	\$377,450	\$0
1980	\$343,552	\$343,552	\$0	\$343,552	\$0	\$343,552	\$0
1981	\$374,852	\$374,852	\$0	\$374,852	\$0	\$374,852	\$0
1982	\$367,763	\$365,968	-\$1,795	\$368,826	\$1,063	\$367,031	-\$732
1983	\$385,241	\$383,361	-\$1,880	\$386,354	\$1,113	\$384,474	-\$767
1984	\$457,528	\$455,296	-\$2,233	\$458,851	\$1,322	\$456,618	-\$910
1985	\$460,834	\$458,585	-\$2,249	\$462,166	\$1,332	\$459,917	-\$917
1986	\$433,723	\$431,607	-\$2,117	\$434,977	\$1,253	\$432,860	-\$863
1987	\$493,548	\$491,139	-\$2,409	\$494,974	\$1,426	\$492,565	-\$982
1988	\$581,862	\$579,022	-\$2,839	\$581,862	\$0	\$579,022	-\$2,839
1989	\$571,998	\$569,206	-\$2,791	\$571,998	\$0	\$569,206	-\$2,791
1990	\$572,804	\$570,008	-\$2,795	\$572,804	\$0	\$570,008	-\$2,795
1991	\$534,097	\$531,490	-\$2,606	\$534,097	\$0	\$531,490	-\$2,606
1992	\$584,340	\$581,489	-\$2,852	\$584,340	\$0	\$581,489	-\$2,852
1993	\$559,905	\$557,172	-\$2,732	\$559,905	\$0	\$557,172	-\$2,732
1994	\$573,425	\$573,425	\$0	\$573,425	\$0	\$573,425	\$0
1995	\$607,152	\$607,152	\$0	\$607,152	\$0	\$607,152	\$0
1996	\$648,486	\$648,486	\$0	\$646,437	-\$2,049	\$646,437	-\$2,049
1997	\$699,415	\$699,415	\$0	\$697,205	-\$2,210	\$697,205	-\$2,210
1998	\$733,783	\$733,783	\$0	\$731,464	-\$2,319	\$731,464	-\$2,319
1999	\$789,231	\$789,231	\$0	\$786,737	-\$2,494	\$786,737	-\$2,494
2000	\$838,377	\$838,377	\$0	\$835,728	-\$2,649	\$835,728	-\$2,649
2001	\$816,224	\$816,224	\$0	\$813,645	-\$2,579	\$813,645	-\$2,579
2002	\$824,488	\$820,464	-\$4,024	\$826,871	\$2,383	\$822,847	-\$1,641
2003	\$842,644	\$838,532	-\$4,112	\$845,080	\$2,435	\$840,968	-\$1,677
2004	\$908,712	\$904,277	-\$4,435	\$905,840	-\$2,872	\$901,406	-\$7,306
2005	\$959,394	\$954,712	-\$4,682	\$956,362	-\$3,032	\$951,680	-\$7,714
2006	\$1,016,567	\$1,011,607	-\$4,961	\$1,013,355	-\$3,212	\$1,008,394	-\$8,173
2007	\$970,970	\$966,231	-\$4,738	\$967,901	-\$3,068	\$963,163	-\$7,807
2008	\$953,002	\$948,351	-\$4,651	\$953,002	\$0	\$948,351	-\$4,651
2009	\$895,810	\$891,438	-\$4,372	\$895,810	\$0	\$891,438	-\$4,372
2010	\$967,505	\$967,505	\$0	\$967,505	\$0	\$967,505	\$0
2011	\$976,327	\$976,327	\$0	\$976,327	\$0	\$976,327	\$0
2012	\$1,051,493	\$1,051,493	\$0	\$1,054,532	\$3,039	\$1,054,532	\$3,039
2013	\$969,049	\$969,049	\$0	\$971,850	\$2,801	\$971,850	\$2,801
2014	\$1,010,903	\$1,010,903	\$0	\$1,013,825	\$2,922	\$1,013,825	\$2,922
Total	\$25,514,715	\$25,449,444	-\$65,271	\$25,509,320	-\$5,396	\$25,444,049	-\$70,667

Table B3: Average Income of the Bottom 50 Percent If Republicans Held the Presidency, Controlled Congress, and Both, 1977-2014 (\$ 2014)

Year	Average	Presid	lent	Cong	ress	Bot	th
	Income	Income	Cost	Income	Cost	Income	Cost
1978	\$21,015	\$20,911	-\$104	\$20,901	-\$114	\$20,797	-\$218
1979	\$21,161	\$21,056	-\$105	\$21,047	-\$115	\$20,942	-\$220
1980	\$20,647	\$20,544	-\$102	\$20,535	-\$112	\$20,433	-\$214
1981	\$20,354	\$20,253	-\$101	\$20,244	-\$110	\$20,143	-\$211
1982	\$19,163	\$19,163	\$0	\$19,108	-\$54	\$19,108	-\$54
1983	\$18,815	\$18,815	\$0	\$18,761	-\$53	\$18,761	-\$53
1984	\$19,356	\$19,356	\$0	\$19,301	-\$55	\$19,301	-\$55
1985	\$19,742	\$19,742	\$0	\$19,685	-\$56	\$19,685	-\$56
1986	\$19,958	\$19,958	\$0	\$19,902	-\$57	\$19,902	-\$57
1987	\$20,355	\$20,355	\$0	\$20,297	-\$58	\$20,297	-\$58
1988	\$20,722	\$20,722	\$0	\$20,610	-\$112	\$20,610	-\$112
1989	\$21,200	\$21,200	\$0	\$21,085	-\$115	\$21,085	-\$115
1990	\$21,209	\$21,209	\$0	\$21,094	-\$115	\$21,094	-\$115
1991	\$20,758	\$20,758	\$0	\$20,646	-\$113	\$20,646	-\$113
1992	\$20,671	\$20,671	\$0	\$20,559	-\$112	\$20,559	-\$112
1993	\$21,113	\$21,113	\$0	\$20,999	-\$114	\$20,999	-\$114
1994	\$21,681	\$21,573	-\$108	\$21,563	-\$118	\$21,456	-\$225
1995	\$21,830	\$21,722	-\$108	\$21,712	-\$118	\$21,604	-\$227
1996	\$22,289	\$22,179	-\$111	\$22,289	\$0	\$22,179	-\$111
1997	\$22,788	\$22,675	-\$113	\$22,788	\$0	\$22,675	-\$113
1998	\$23,578	\$23,461	-\$117	\$23,578	\$0	\$23,461	-\$117
1999	\$24,085	\$23,965	-\$119	\$24,085	\$0	\$23,965	-\$119
2000	\$24,560	\$24,438	-\$122	\$24,560	\$0	\$24,438	-\$122
2001	\$24,628	\$24,506	-\$122	\$24,628	\$0	\$24,506	-\$122
2002	\$24,327	\$24,327	\$0	\$24,258	-\$69	\$24,258	-\$69
2003	\$24,196	\$24,196	\$0	\$24,127	-\$69	\$24,127	-\$69
2004	\$24,674	\$24,674	\$0	\$24,674	\$0	\$24,674	\$0
2005	\$25,149	\$25,149	\$0	\$25,149	\$0	\$25,149	\$0
2006	\$25,506	\$25,506	\$0	\$25,506	\$0	\$25,506	\$0
2007	\$25,640	\$25,640	\$0	\$25,640	\$0	\$25,640	\$0
2008	\$25,486	\$25,486	\$0	\$25,348	-\$138	\$25,348	-\$138
2009	\$23,682	\$23,682	\$0	\$23,554	-\$128	\$23,554	-\$128
2010	\$24,162	\$24,042	-\$120	\$24,031	-\$131	\$23,911	-\$251
2011	\$24,232	\$24,112	-\$120	\$24,101	-\$131	\$23,981	-\$252
2012	\$24,083	\$23,964	-\$119	\$24,015	-\$68	\$23,896	-\$188
2013	\$24,613	\$24,491	-\$122	\$24,543	-\$70	\$24,421	-\$192
2014	\$25,047	\$24,923	-\$124	\$24,976	-\$71	\$24,851	-\$195
Total	\$832,475	\$830,537	-\$1,938	\$829,898	-\$2,577	\$827,960	-\$4,515

Table B4: Average Income of the Top One Percent If Republicans Held the Presidency, Controlled Congress, and Both, 1977-2014 (\$ 2014)

Year	Average	Preside	ent	Congre	ess	Bot	h
	Salary	Income	Benefit	Income	Benefit	Income	Benefit
1978	\$362,264	\$364,032	\$1,768	\$363,408	\$1,145	\$365,176	\$2,913
1979	\$377,450	\$379,292	\$1,842	\$378,643	\$1,193	\$380,485	\$3,035
1980	\$343,552	\$345,228	\$1,677	\$344,638	\$1,086	\$346,314	\$2,762
1981	\$374,852	\$376,681	\$1,829	\$376,036	\$1,185	\$377,865	\$3,014
1982	\$367,763	\$367,763	\$0	\$369,988	\$2,225	\$369,988	\$2,225
1983	\$385,241	\$385,241	\$0	\$387,571	\$2,331	\$387,571	\$2,331
1984	\$457,528	\$457,528	\$0	\$460,296	\$2,768	\$460,296	\$2,768
1985	\$460,834	\$460,834	\$0	\$463,622	\$2,788	\$463,622	\$2,788
1986	\$433,723	\$433,723	\$0	\$436,347	\$2,624	\$436,347	\$2,624
1987	\$493,548	\$493,548	\$0	\$496,534	\$2,986	\$496,534	\$2,986
1988	\$581,862	\$581,862	\$0	\$583,700	\$1,839	\$583,700	\$1,839
1989	\$571,998	\$571,998	\$0	\$573,805	\$1,808	\$573,805	\$1,808
1990	\$572,804	\$572,804	\$0	\$574,614	\$1,810	\$574,614	\$1,810
1991	\$534,097	\$534,097	\$0	\$535,784	\$1,688	\$535,784	\$1,688
1992	\$584,340	\$584,340	\$0	\$586,187	\$1,847	\$586,187	\$1,847
1993	\$559,905	\$559,905	\$0	\$561,674	\$1,769	\$561,674	\$1,769
1994	\$573,425	\$576,223	\$2,798	\$575,237	\$1,812	\$578,035	\$4,610
1995	\$607,152	\$610,115	\$2,963	\$609,070	\$1,919	\$612,033	\$4,882
1996	\$648,486	\$651,651	\$3,165	\$648,486	\$0	\$651,651	\$3,165
1997	\$699,415	\$702,828	\$3,413	\$699,415	\$0	\$702,828	\$3,413
1998	\$733,783	\$737,363	\$3,581	\$733,783	\$0	\$737,363	\$3,581
1999	\$789,231	\$793,083	\$3,851	\$789,231	\$0	\$793,083	\$3,851
2000	\$838,377	\$842,469	\$4,091	\$838,377	\$0	\$842,469	\$4,091
2001	\$816,224	\$820,207	\$3,983	\$816,224	\$0	\$820,207	\$3,983
2002	\$824,488	\$824,488	\$0	\$829,476	\$4,988	\$829,476	\$4,988
2003	\$842,644	\$842,644	\$0	\$847,742	\$5,098	\$847,742	\$5,098
2004	\$908,712	\$908,712	\$0	\$908,712	\$0	\$908,712	\$0
2005	\$959,394	\$959,394	\$0	\$959,394	\$0	\$959,394	\$0
2006	\$1,016,567	\$1,016,567	\$0	\$1,016,567	\$0	\$1,016,567	\$0
2007	\$970,970	\$970,970	\$0	\$970,970	\$0	\$970,970	\$0
2008	\$953,002	\$953,002	\$0	\$956,013	\$3,011	\$956,013	\$3,011
2009	\$895,810	\$895,810	\$0	\$898,641	\$2,831	\$898,641	\$2,831
2010	\$967,505	\$972,227	\$4,721	\$970,563	\$3,057	\$975,284	\$7,779
2011	\$976,327	\$981,092	\$4,764	\$979,413	\$3,085	\$984,177	\$7,850
2012	\$1,051,493	\$1,056,624	\$5,131	\$1,057,855	\$6,362	\$1,062,986	\$11,493
2013	\$969,049	\$973,778	\$4,729	\$974,912	\$5,863	\$979,641	\$10,592
2014	\$1,010,903	\$1,015,836	\$4,933	\$1,017,019	\$6,116	\$1,021,952	\$11,049
Total	\$25,514,715	\$25,573,956	\$59,241	\$25,589,946	\$75,231	\$25,649,187	\$134,472

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Robert J. Shapiro is a Senior Policy Scholar at the Center for Business and Public Policy of the Georgetown University McDonough School of Business, and the chairman of Sonecon, LLC, a private firm that advises U.S. and foreign businesses, governments and non-profit organizations on economic and national security matters. Currently, he is also chairman of the Globalization Initiative at NDN, an advisory board member for Cote Capital and Gilead Sciences, and a director of Medici Ventures. Dr. Shapiro has advised, among others, U.S. President Bill Clinton; British Prime Minister Tony Blair, Chancellor Gordon Brown and Foreign Minister David Miliband; U.S. Treasury Secretaries Timothy Geithner and Robert Rubin, CEA chairs Janet Yellen, Austan Goolsbee and Jason Furman; numerous other senior officials of the Obama and Clinton administrations; and many members of the U.S. Congress. He and Sonecon also have advised senior executives from Amgen, AT&T, Elliot Management, Exxon-Mobil, Google, Liberty Mutual, Overstock, Nordstjernan of Sweden and Fujitsu of Japan, and from non-profit organizations including the International Monetary Fund, the Center for American Progress, and PhRMA. From 1997 to 2001, Dr. Shapiro was the Under Secretary of Commerce for Economic Affairs; and prior to that, he was co-founder and Vice President of the Progressive Policy Institute and Legislative Director and Economic Counsel for Senator Daniel P. Moynihan. He also served as the principal economic advisor in Bill Clinton's 1991-1992 presidential campaign and as economic advisor to Hillary Clinton, Barack Obama, John Kerry and Al Gore, Jr. in their campaigns. Dr. Shapiro has been a Fellow of Harvard University, the Brookings Institution, the National Bureau of Economic Research, and the Fujitsu Institute. He holds a Ph.D. and M.A. from Harvard University, an A.B. from the University of Chicago and a M.Sc. from the London School of Economics and Political Science.