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Reversal of the Trend: Income Inequality Now Lower than It Was under Clinton

By
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Introduction

Numerous academic studies have shown that income inequality in the U.S. over the 20th century exhibits a U-shape. After reaching a peak in the 1920s, it fell during the Great Depression and World War II and rebounded mainly in the 1980s and 1990s.[1] The rebound has been attributed to various economic factors, such as the computer revolution, globalization, and increased migration of both low- and high-skilled workers. However, these factors might better be described as the normal outcomes of a growing economy, according to Adam Smith's idea that the division of labor is limited by the extent of the market. The resurgence of inequality has also been attributed to tax policy, particularly the reduction of top marginal rates on personal income from 94 percent in 1945 to 28 percent in 1988.[2]

The first decade of the 21st century does not exhibit the same trend. Based on the most recent IRS data, from 2009, income inequality has fluctuated considerably since 2000 but is now at about the level it was in 1997. Thus, the Bush-era tax cuts (which had provisions benefitting both high- and low-income taxpayers) did not lead to increased income inequality. By contrast, inequality rose 12 percent between 1993 and 2000, following two

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[1] See for example the following:
Daniel Feenberg and James Poterba, "The Income and Tax Share of Very High Income Households, 1960 – 1995," *American Economic Review*, May 2000.
Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998," *The Quarterly Journal of Economics*, February 2003. Data updated to 2008 here: http://elsa.berkeley.edu/~saez/
Anthony Atkinson, Thomas Piketty, and Emmanuel Saez, "Top Incomes in the Long Run of History," *Journal of Economic Literature*, March 2011.
[2] History of rates here: http://taxfoundation.org/taxdata/show/151.html

tax rate increases on high-income earners. Thus, changes in inequality over the last two decades appear to be driven more by the business cycle than by tax policy.

Why 2006 and 2007 Are Not Representative

The most recent published studies on income inequality use 2006 or 2007 as their end point, without fully correcting for the business cycle. For example, in an article published in March 2011,[3] Atkinson, Piketty, and Saez look at income shares from the early 20th century up to 2007, finding:

> After a precipitous (10 percentage point) decline during World War II and stability in the postwar decades, the top decile share [of income] has surged (a rise of more than 10 percentage points) since the 1970s and reached almost 50 percent by 2007, the highest level on record.

In a study published in October 2011, the Congressional Budget Office concludes that income inequality increased significantly between 1979 and 2007, and that part of the reason is that the federal tax code has become less progressive, i.e. redistributive.[4] The most recent study,[5] published in December 2011 by the Congressional Research Service (CRS), highlights just two years, 1996 and 2006, and concludes:

> Changes in income from capital gains and dividends were the single largest contributor to rising income inequality between 1996 and 2006. Changes in tax policy also made a significant contribution to the increase in income inequality, but even in the absence of tax policy changes income inequality would likely have increased.

The CRS justifies their choice of years as follows:

> The years 1996 and 2006 are examined for several reasons. First, both years were at approximately similar points of the business-cycle with moderate inflation (about 3%), a modest unemployment rate (about 5%), and moderate economic growth (3.7% in 1996 and 2.7% in 2006). Second, 2006 was the year before the August 2007 liquidity crunch and the onset of the severe 2007-2009 recession. Third, there were major tax policy changes between these two years. Fourth, both 1996 and 2006 were three years after the enactment of tax legislation that affected tax rates and are unlikely to be affected by short-run behavioral responses to these changes.

In fact, 1996 and 2006 are not even close to similar points in the business cycle: 1996 was at the beginning of an economic expansion that lasted another four years, while 2006 was at the end of an economic expansion that ended the following year.

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[3] Anthony Atkinson, Thomas Piketty, and Emmanuel Saez, "Top Incomes in the Long Run of History," *Journal of Economic Literature*, March 2011.

[4] "Trends in the Distribution of Household Income between 1979 and 2007", Congressional Budget Office, October 2011. See our critique here: http://www.taxfoundation.org/blog/show/27722.html

[5] Thomas Hungerford, "Changes in the Distribution of Income among Tax Filers between 1996 and 2006: The Role of Labor Income, Capital Income, and Tax Policy," Congressional Research Service, December 29, 2011. http://taxprof.typepad.com/files/crs-2.pdf

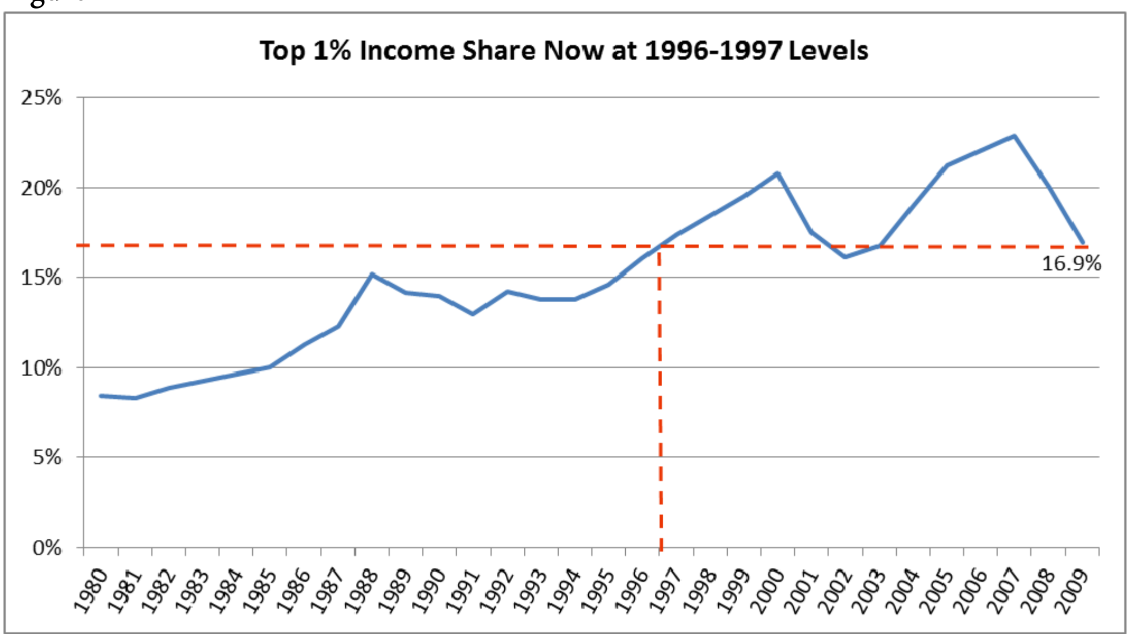
It is deeply misleading to talk about income inequality without properly taking into account the business cycle. Since the peak of the business cycle in 2007, personal incomes have collapsed to a degree not seen since the Great Depression. The most dramatic collapse has been in high incomes, as the most recent IRS data shows.[6] For example, since 2007 the number of millionaires has dropped 40 percent, while income reported by millionaires has dropped in half.[7]

Updated Measures of Income Inequality

Figure 1 illustrates how the Great Recession has dramatically reduced measures of income inequality. It shows the share of income attributable to the top 1 percent of income earners from 1980 to 2009. The top 1 percent income share peaked in 2007 at 22.8 percent and declined precipitously to 16.9 percent by 2009. This is about where it was in 1996-1997. This data is also shown in Table 1.

Figure 2 shows that another standard measure of income inequality, the Gini coefficient, is consistent with these results. The Gini coefficient is a ratio that ranges from zero to one, with zero indicating perfect equality and one indicating perfect inequality. As with the top 1 percent share, the Gini coefficient peaked in 2007, at 0.574. From there, it fell 7 percent to 0.535 in 2009, which is about where it was in 1997-1998.

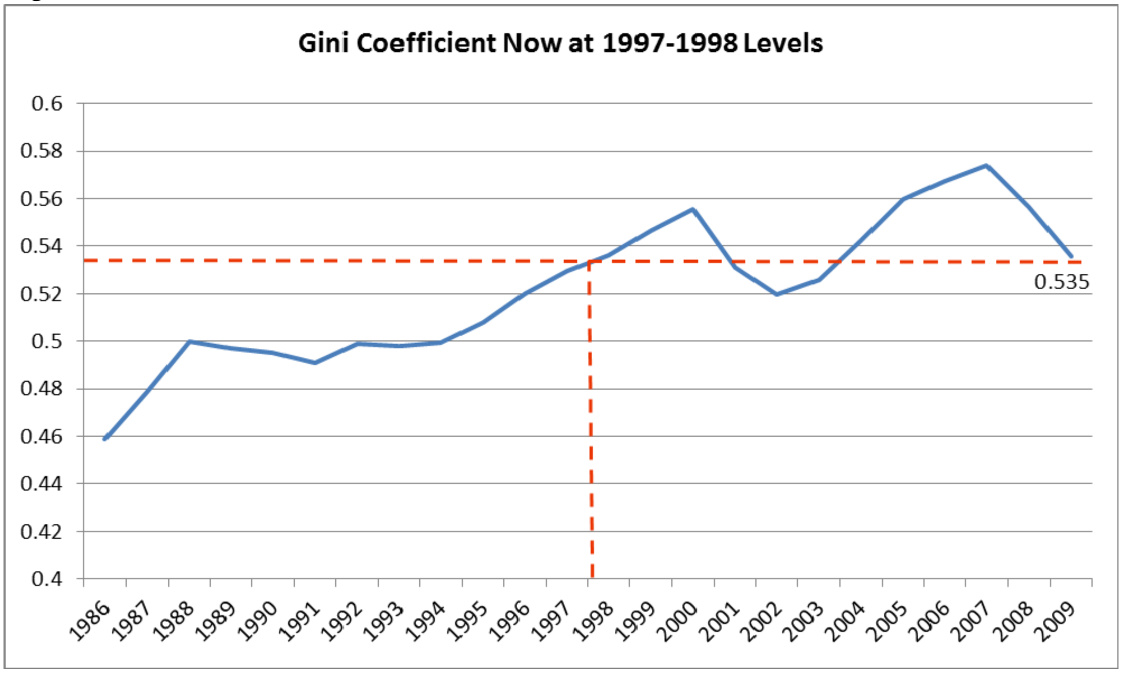
Figure 1



Note: Income is Adjusted Gross Income.
Source: IRS. http://www.irs.gov/taxstats/indtaxstats/article/0,,id=133521,00.html

[6] David Logan, "Summary of Latest Federal Individual Income Tax Data," *Tax Foundation, Fiscal Fact* No. 285. http://www.taxfoundation.org/news/show/250.html
[7] http://www.taxfoundation.org/blog/show/27679.html

Figure 2



Note: The income shares used to calculate the Gini coefficient are those provided by the IRS: Bottom 50, 75, 90, 95, and 99 percent. Additional percentiles, particularly at the low end, would make for a more accurate estimation, but nonetheless this method produces numbers that closely match other published estimates.
Source: IRS. http://www.irs.gov/taxstats/indtaxstats/article/0,,id=133521,00.html

Both measures of income inequality exhibit a strong upward trend between the 1980s and 2000. The first episode occurred during the Reagan economic expansion of 1981-1988, and the second episode occurred during the Clinton expansion of 1993-2000. Each episode increased the top 1 percent share of the nation's income by about 7 percentage points. Under Clinton, the top 1 percent's share went from 13.8 percent in 1993 to 20.8 percent in 2000. Likewise, the Gini coefficient went from 0.498 in 1993 to 0.555 in 2000 – an increase of 12 percent.

In contrast, the period since 2000 exhibits no underlying trend in income inequality, but rather dramatic fluctuations resulting from the business cycle. Income inequality at the beginning and end of the Bush years was virtually unchanged, with the top 1 percent share going from 20.8 percent in 2000 to 20.0 percent in 2008. Likewise, the Gini coefficient went from 0.555 in 2000 to 0.557 in 2008. By 2009, as mentioned, both measures of income inequality had fallen to 1997 levels.

The Role of Tax Policy

The 20th century history of income inequality and income tax rates does indicate a strong relationship. As others have noted, it is very plausibly the case that income inequality only began to return to pre-

Depression levels once tax rates returned to pre-Depression levels.[8] The range of tax rates over this period is dramatic, going from a top marginal rate of 7 percent in 1913, to 94 percent in 1944-1945, to 28 percent in 1988.[9]

Since 1988, changes in tax rates have been relatively small, and do not appear to have had a consistent effect on income inequality. In 1991, George H.W. Bush raised the top marginal rate to 31 percent from 28 percent, and in 1993 Clinton raised it further to 39.6 percent. This was followed by a long period of increasing income inequality. By contrast, George W. Bush lowered rates in 2001 and 2003 and inequality fluctuated with the business cycle, ultimately falling below where it was in 2000.

Figure 3 shows the top marginal rate on ordinary personal income, from 1986 to 2009. 1986 was the last major tax reform, and it dramatically lowered the top marginal rate on ordinary income. This began a long trend of business income moving from the corporate code to the personal code in the form of pass-through entities such as partnerships and S-corporations, such that now the majority of business income is taxed under the personal code. Further, a large share of that business income accrues to high-income earners. For instance, about a third of the income of millionaires is from business sources.[10] This alone might explain much of the measured increase in income inequality since 1986.

Top marginal rates on personal income are but one indication of how taxes might affect inequality. A more comprehensive measure of the overall progressivity of the income tax code is the share of income taxes paid by the top 1 percent, which is shown in Figure 4 as well as Table 1. The share of taxes paid by the top 1 percent has roughly doubled since the early 1980s, from 17.6 percent in 1981 to 36.7 percent in 2009. And unlike the top 1 percent's share of income, the long-term upward trend remains intact. Since the peak in 2007, the share of taxes paid by the top 1 percent has fallen back to 1999-2000 levels, whereas the top 1 percent's share of income has fallen further, to 1996-1997 levels.

This implies that the overall progressivity of the federal income tax code, taking into account income shares, has increased since 2000. Figure 5 and Table 1 show a measure of progressivity that takes into account income shares, where progressivity is defined as the ratio of the top 1 percent's share of taxes paid over their share of income.[11] Progressivity by this measure is now higher than at any time since 1986, though it has mainly fluctuated with the business cycle without any long-run trend. The fact that progressivity has increased since Clinton was in office may be partly explained by the fact that the Bush

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[8] Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998," *The Quarterly Journal of Economics*, February 2003. Data updated to 2008 here: http://elsa.berkeley.edu/~saez/
Anthony Atkinson, Thomas Piketty, and Emmanuel Saez, "Top Incomes in the Long Run of History," *Journal of Economic Literature*, March 2011.

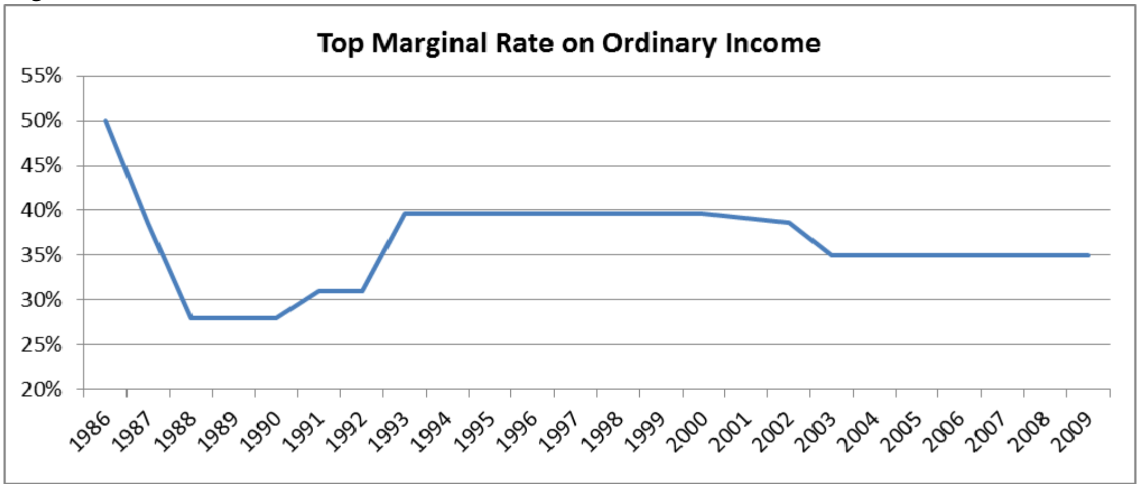
[9] History of rates here: http://taxfoundation.org/taxdata/show/151.html

[10] http://www.taxfoundation.org/blog/show/27676.html

[11] The OECD uses a similar measure of progressivity. For instance, see: *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD, 2008.

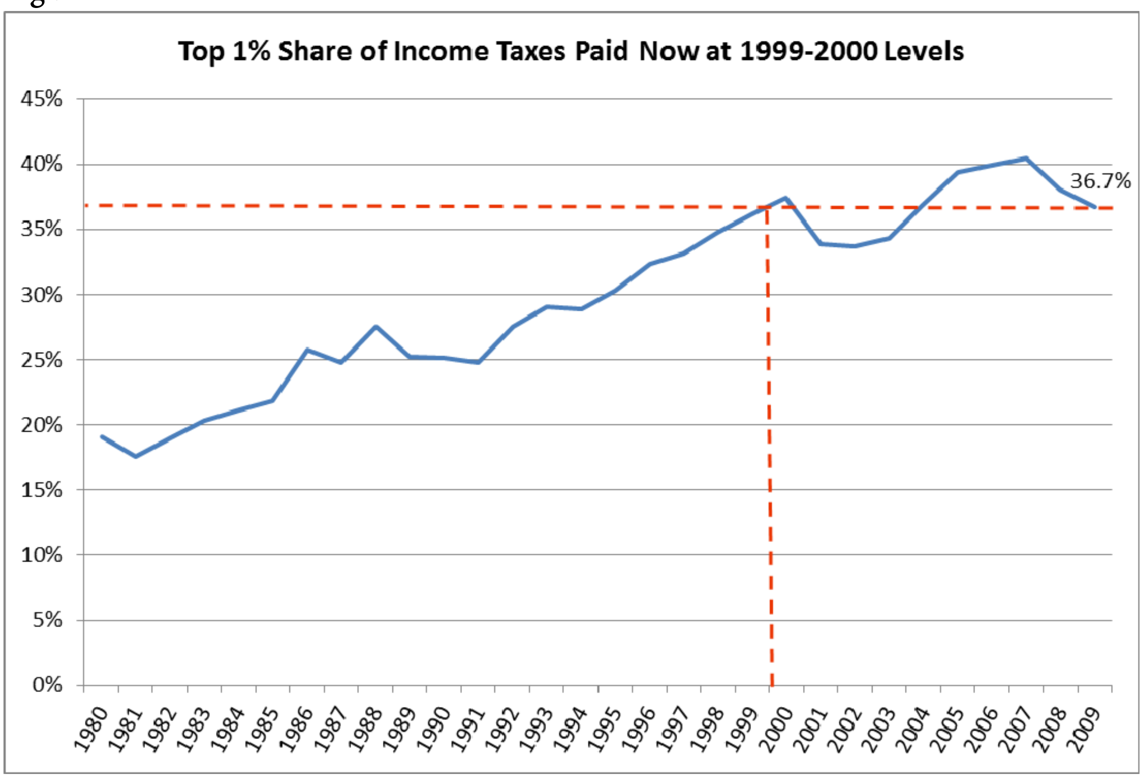
tax cuts not only lowered top marginal rates, but also introduced the 10 percent bracket, expanded the 15 percent bracket, expanded the child credit, and made many tax credits refundable.[12]

Figure 3



Source: IRS, http://taxfoundation.org/taxdata/show/151.html

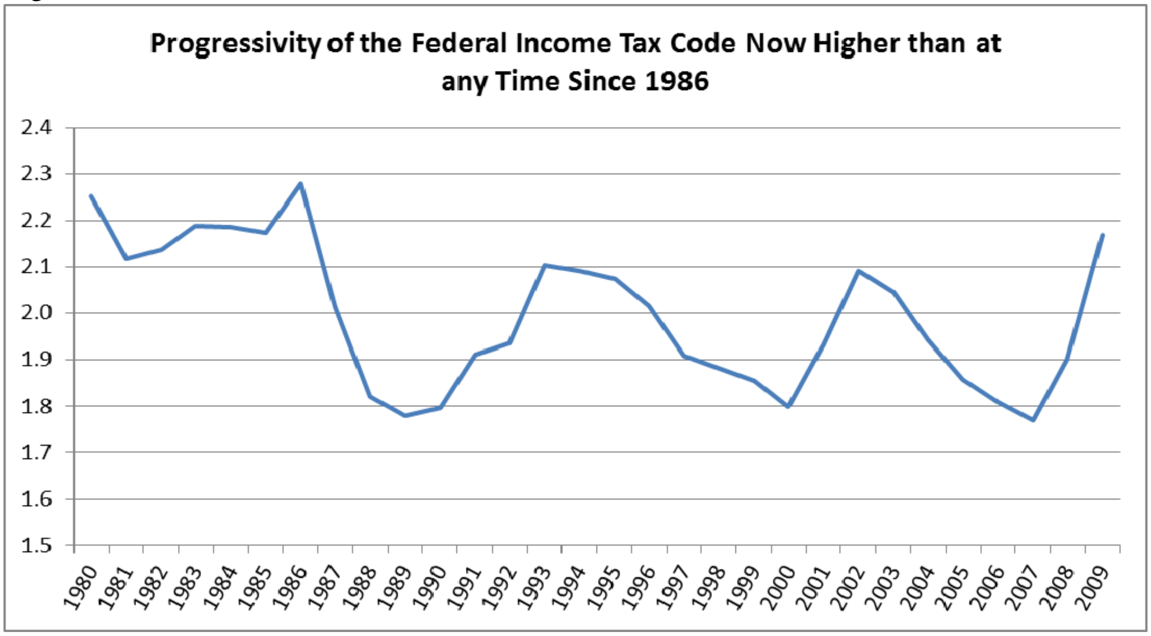
Figure 4



Source: IRS. http://www.irs.gov/taxstats/indtaxstats/article/0,,id=133521,00.html

[12] http://taxfoundation.org/research/topic/172.html

Figure 5



Note: Progressivity is defined as the ratio of the top 1 percent's tax share divided by their income share. The Tax Reform Act of 1986 changed the definition of adjusted gross income, so data before and after is not strictly comparable.

Source: IRS, Tax Foundation summary: http://taxfoundation.org/research/show/250.html

Table 1
Progressivity of the Federal Income Tax Code, Taking into Account Income Shares

Year	Top 1% Income Share (A)	Top 1% Tax Share (B)	Progressivity (B/A)
1980	8.46%	19.05%	2.25
1981	8.30%	17.58%	2.12
1982	8.91%	19.03%	2.14
1983	9.29%	20.32%	2.19
1984	9.66%	21.12%	2.19
1985	10.03%	21.81%	2.17
1986	11.30%	25.75%	2.28
1987	12.32%	24.81%	2.01
1988	15.16%	27.58%	1.82
1989	14.19%	25.24%	1.78
1990	14.00%	25.13%	1.80
1991	12.99%	24.82%	1.91
1992	14.23%	27.54%	1.94
1993	13.79%	29.01%	2.10
1994	13.80%	28.86%	2.09
1995	14.60%	30.26%	2.07
1996	16.04%	32.31%	2.01
1997	17.38%	33.17%	1.91
1998	18.47%	34.75%	1.88
1999	19.51%	36.18%	1.85
2000	20.81%	37.42%	1.80
2001	17.53%	33.89%	1.93
2002	16.12%	33.71%	2.09
2003	16.77%	34.27%	2.04
2004	19.00%	36.89%	1.94
2005	21.20%	39.38%	1.86
2006	22.06%	39.89%	1.81
2007	22.83%	40.41%	1.77
2008	20.00%	38.02%	1.90
2009	16.93%	36.73%	2.17

Note: The Tax Reform Act of 1986 changed the definition of adjusted gross income, so data before and after is not strictly comparable.
Source: IRS, Tax Foundation summary: http://taxfoundation.org/research/show/250.html

Capital Gains and Volatility

The overwhelming characteristic of income inequality in the last decade is its volatility. Much of this is due to the business cycle, and in turn fluctuations in the stock market and capital gains, since capital gains mainly accrue to high-income earners. For instance, in 2009 about 20 percent of the income of millionaires was from capital gains.[13]

Figure 6 shows capital gains as a share of income (for all tax filers, not just millionaires), from 1990 to 2009. Capital gains went from 10.2 percent of adjusted gross income in 2007 to 3.0 percent in 2009,

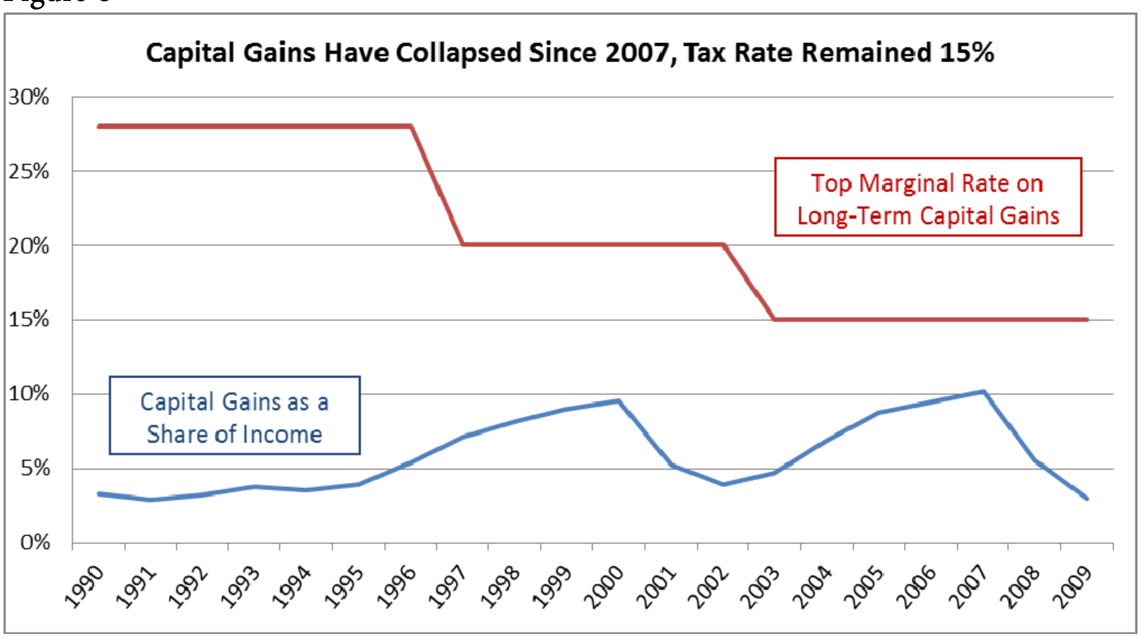
[13] http://www.taxfoundation.org/blog/show/27676.html

while the tax rate on long-term capital gains remained 15 percent. Capital gains as a share of income are now lower than they were before the Bush tax cuts. Likewise, capital gains both increased and decreased between 1997 and 2002 while the capital gains rate stayed at 20 percent.

Figure 7 shows capital gains in dollar terms and compares it to the S&P 500. Clearly, capital gains track the stock market, and are not much affected in the short term by tax rates over this range. Capital gains realizations were $238 billion in 2002, peaked at $896 billion in 2007, and then collapsed to $231 billion by 2009 – a drop of 74 percent in two years. Thus, by this measure as well, capital gains are lower now than they were before the Bush tax cuts.

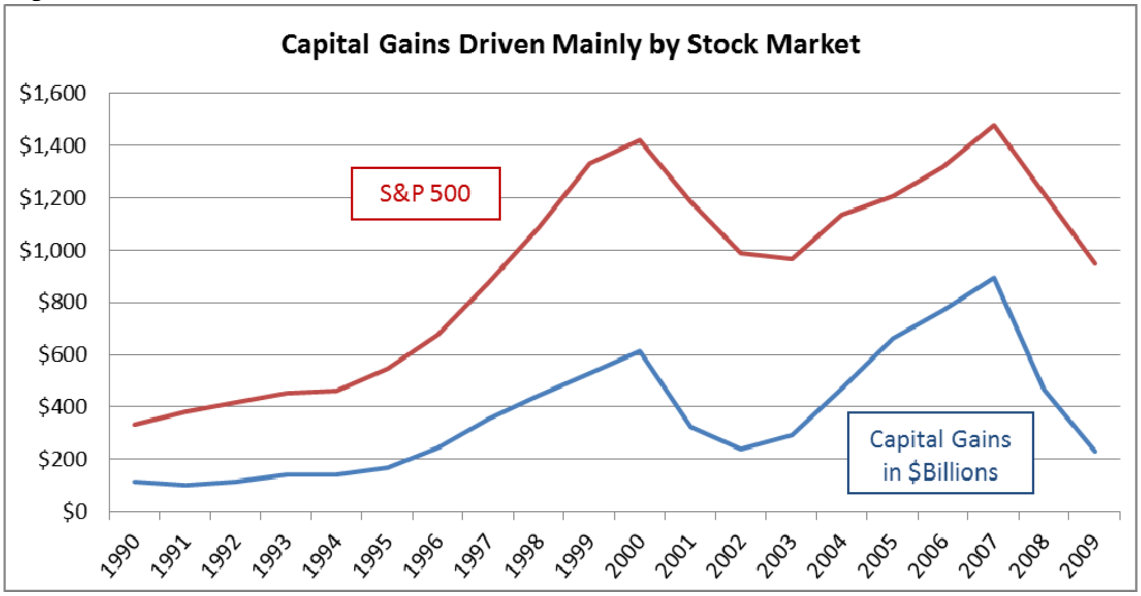
It's possible that lowering the tax rate on capital gains created more volatility in the stock market and, thus, capital gains realizations and personal incomes. However, with only two major stock market cycles since 1990, the evidence is inconclusive. During this time, numerous other factors certainly contributed to stock market volatility, such as the internet revolution, war, monetary policy, demographics, and the housing bubble. In the longer series of data presented by Atkinson, Piketty, and Saez (2011), it is evident that the 1920s exhibited a similar degree of volatility in terms of inequality, capital gains, and the stock market. As well, the Revenue Act of 1921 brought the rate on capital gains well below the rate on ordinary income, to 12.5 percent. However, as with recent decades, numerous macroeconomic factors were present in the 1920s that likely had a larger impact on stock market volatility.

Figure 6



Source: IRS. http://www.irs.gov/taxstats/indtaxstats/article/0,,id=134951,00.html

Figure 7



Source: IRS. http://www.irs.gov/taxstats/indtaxstats/article/0,,id=134951,00.html

Conclusion

Income inequality has completely changed since the Great Recession began in late 2007. The long established upward trend has abruptly reversed itself, such that inequality is back where it was in about 1997. Moreover, inequality over the last decade is characterized by extreme volatility, owing to extreme volatility in capital gains, the stock market, and the economy. It is therefore no longer legitimate—if it ever was—to simply draw a line between two years and claim a trend in income inequality.

As a result, it is not evident that the Bush tax cuts in either the top marginal rate or capital gains rate had any long-term effect on inequality. If anything, they appear to have reduced inequality. Therefore, a return to Clinton-era tax rates would not necessarily reduce inequality. The Clinton- and Bush-era tax cuts in the capital gains rate may have resulted in more volatility in capital gains realizations, and thus affected volatility in the stock market, but this remains speculative.

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