

# REACTIONS OF HIGH-INCOME TAXPAYERS TO MAJOR TAX LEGISLATION

Gerald Auten, David Splinter, and Susan Nelson

*This paper examines how high-income taxpayers reacted to major tax legislation that affected incentives for realizations of capital gains, the form of compensation, type of investments, and the choice of organizational form for businesses. The Tax Reform Act of 1969, the Tax Reform Act of 1986, the Omnibus Budget Reconciliation Act of 1993, and the American Taxpayer Relief Act of 2012 are considered. The paper summarizes prior research and provides new evidence of short-term and longer-term responses of high-income taxpayers. The analysis uses individual and business tax return information to examine some of the most salient features of each of these laws. Examining the responses to prior reforms can inform discussion of the effects of future tax reform proposals.*

*Keywords:* tax reform, tax avoidance, income shifting

*JEL Codes:* H24, H25, H26

## I. INTRODUCTION

Over the last 50 years, several landmark tax laws targeted high-income taxpayers in ways that affected incentives for earning and realizing income. Some of these laws raised tax rates for high-income taxpayers while others reduced them. Some broadened the tax base by repealing tax expenditures or loopholes that fostered tax avoidance, while others narrowed it by creating new or more generous deductions and exclusions. Top tax rates on ordinary income changed significantly seven times over this 50-year period (Figure 1). Top tax rates on long-term capital gains changed even more often. How did high-income taxpayers respond to the new incentives created by major changes in tax laws? Were the responses mainly short-term shifting of income and deductions or is there evidence of longer-term effects on behavior and real economic activity?

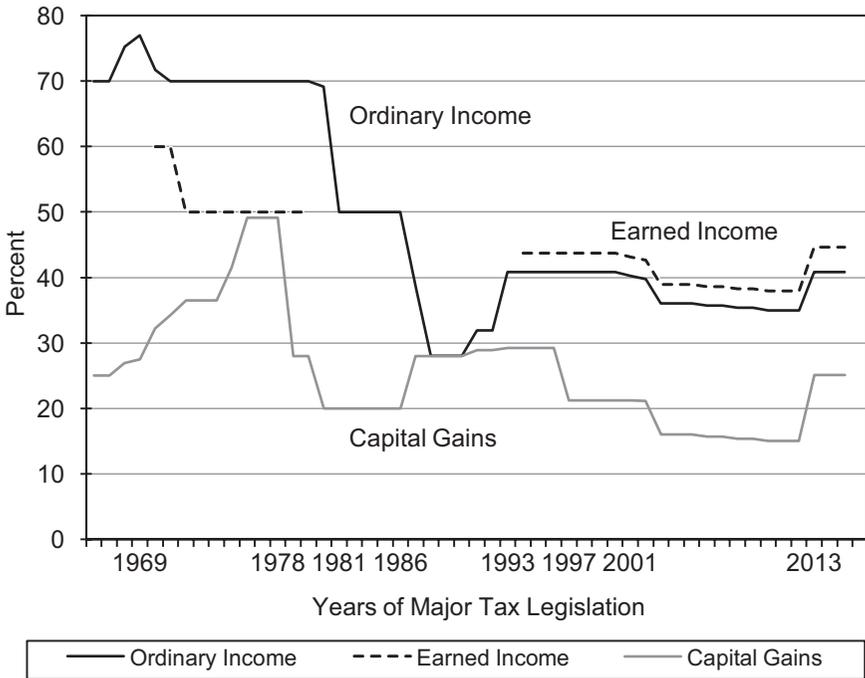
---

Gerald Auten: Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC, USA ([gerald.auten@treasury.gov](mailto:gerald.auten@treasury.gov))

David Splinter: Joint Committee on Taxation, U.S. Congress, Washington, DC, USA ([david.splinter@jct.gov](mailto:david.splinter@jct.gov))

Susan Nelson: Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC, USA ([susanclnelson70@gmail.com](mailto:susanclnelson70@gmail.com))

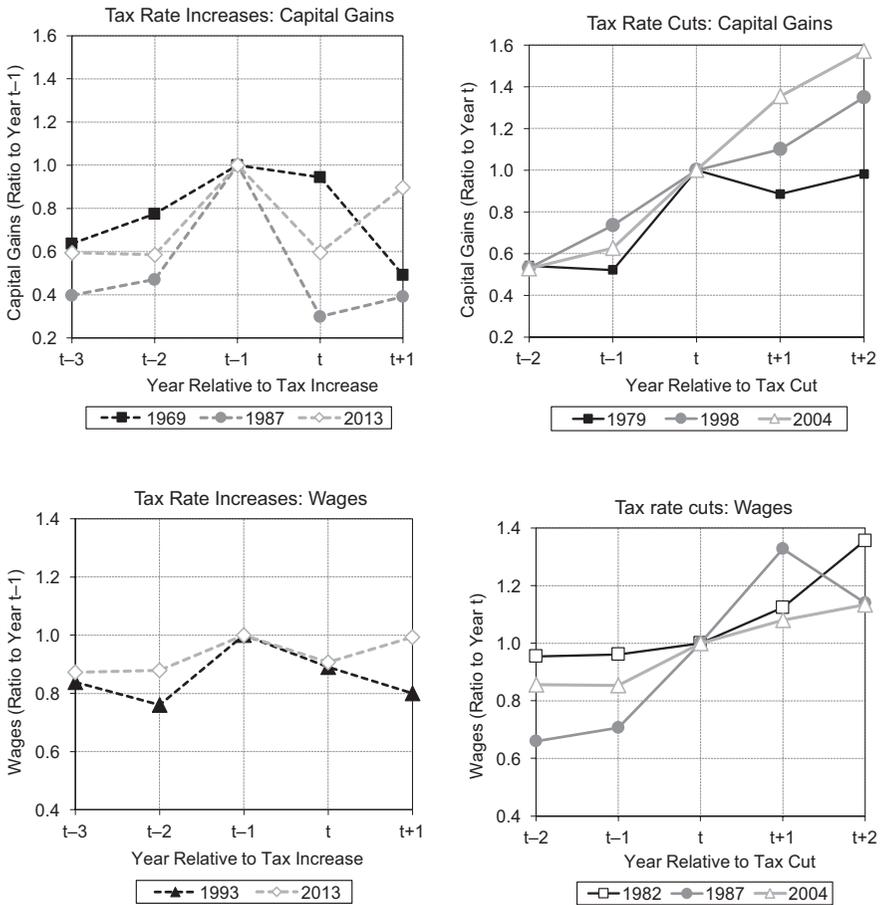
**Figure 1**  
Top Individual Income Tax Rates, 1966–2015



Notes: The ordinary income rate includes the effects of the phaseout of itemized deductions (3 percent 1991–2005 and 2013–present, 2 percent in 2006–2007, 1 percent in 2008–2009). The long-term capital gains rate includes the effects of exclusions (1986 and before), alternative tax rates (1978 and before, 1981), maximum tax rate (1991–1997), minimum tax (1970–1978), alternative minimum tax (1979–present), income tax surcharges (1968–1970), the phaseout of itemized deductions, and the 3.8 percent tax on net investment income (2013–present). The earned income rate includes the maximum tax rate for 1972–1980, the uncapped HI tax since 1994, and the Additional Medicare tax since 2013. Sources: Office of Tax Analysis (2016b) and authors' computations

Some of the more notable short-run responses of high-income taxpayers were quite dramatic (Figure 2). When the Tax Reform Act of 1986 (TRA86) increased capital gains tax rates in 1987, for example, capital gains realizations nearly doubled as high-income taxpayers accelerated capital gains realizations into 1986 to avoid the higher rates and then declined thereafter. Earlier, high-income taxpayers had responded to higher rates imposed by the Tax Reform Act of 1969 by reducing their realizations. Following the reductions in capital gains tax rates fully effective in 1979 and 1998 (Figure 2, top

**Figure 2**  
 Capital Gains and Wages Before and After Major Tax Rate Changes:  
 Top 0.1 Percent



Notes: Capital gains are those affected by preferential rates (net long-term gains in excess of net short-term losses) and income thresholds are based on total income including capital gains. Wages include wages and salaries and Sch. C self-employment income and income thresholds are based on total income excluding capital gains. Years of tax cuts are those following year of enactment. Top 0.1 percent thresholds are based on tax units, using the number of non-filing tax units from the website of Emmanuel Saez, <http://eml.berkeley.edu/~saez/>. Sources: SOI individual tax files; authors' calculations

right panel), capital gains realizations increased significantly and the increases were sustained.<sup>1</sup>

Large increases in top tax rates on ordinary income also resulted in short-run responses by high-income taxpayers (Figure 2, bottom panels). The Omnibus Budget Reconciliation Act of 1993 (OBRA93) increased the top individual income tax rate from 31 percent to 39.6 percent. The American Taxpayer Relief Act of 2012 (ATRA) in combination with tax provisions in the Affordable Care Act (ACA) increased top tax rates about 7 percentage points on earned income. In each case, high-income taxpayers responded to these large increases in tax rates by accelerating the receipt of wages ahead of the effective dates and increasing tax planning to reduce the impact in following years.

To better understand how high-income taxpayers are likely to respond to future tax reforms, it is useful to review how high-income taxpayers responded to major tax changes in the recent past. While many studies have examined the effects of particular tax laws (e.g., Auerbach and Slemrod, 1997), this paper examines the provisions most likely to affect high-income taxpayers in several key laws.<sup>2</sup> In particular, the paper focuses on the Tax Reform Act of 1969, TRA86, OBRA93, and the 2013 tax increases from ATRA and the ACA. For each of these laws, the paper discusses background leading up to enactment, key provisions, effects on incentives, and evidence on how high-income taxpayers responded.

## II. THE TAX REFORM ACT OF 1969 AND CAPITAL GAINS RATES

The Tax Reform Act of 1969 is commonly thought to have begun a period of tax reform. When Congress lowered the top individual tax rate from 91 percent to 70 percent in the Revenue Act of 1964, it did not include the base broadening provisions recommended by the U.S. Department of the Treasury (Treasury). As a result, Harvey Brazer described the tax law of the 1960s as “dipping deeply into the incomes of the wealthy with a sieve.”<sup>3</sup> Okner (1975) estimated that millionaires paid average effective individual tax rates of just 19 percent in 1966, well below the top statutory rates of 70 percent on ordinary income and 25 percent on capital gains.

In early 1969, Treasury Secretary Joseph Barr testified before Congress that 155 taxpayers with incomes exceeding \$200,000 (about \$1.3 million in 2015 dollars) had paid no income tax in a recent year. Congress responded by enacting numerous reforms in the Tax Reform Act of 1969, including new individual and corporate add-on 10 percent minimum taxes on specified tax preferences to raise revenue from high-income taxpayers who had significantly lowered their tax liabilities through tax shelters and

---

<sup>1</sup> In both of these cases, the lower rates became effective mid-year in the prior year when the law was enacted.

<sup>2</sup> Steuerle (2004) and Slemrod (1994) examine the effects of tax legislation from the mid-1960s through the late 1980s.

<sup>3</sup> Brazer was Deputy Assistant Secretary of the Office of Tax Analysis, 1961–1963, serving under Stanley Surrey. This quote was passed along by Emil Sunley, a Brazer student who later held this position, 1977–1981.

preferences (Joint Committee on Internal Revenue Taxation, 1970). The 1969 Act also introduced a new 50 percent maximum tax rate on earned income (60 percent in 1971) to reduce the disincentive of high tax rates on earned income and reduce the incentive for tax avoidance.<sup>4</sup> The minimum standard deduction and personal exemptions were increased with the goal of removing all income tax liability from the poor and providing substantial reductions for the near poor.

Consistent with the policy goal of taxing all income at the same rates, capital gains rates were increased substantially to bring them closer to ordinary rates. Prior law provided that 50 percent of capital gains were taxed at ordinary rates and that taxpayers in tax brackets over 50 percent could elect an alternative maximum rate of 25 percent. The 1969 law raised the alternative tax rate to 29.5 percent in 1970 and 32.5 percent starting in 1971 and limited eligible gains to \$50,000. In addition, the excluded long-term gains were subject to a new minimum tax on tax preferences. As a result of the additional effect of the minimum tax, the top capital gains rate increased to 36.5 percent by 1972. The 1976 Act went further, producing a 39.875 percent rate and even a 49.875 percent rate that could affect taxpayers benefitting from the 50 percent maximum rate on earned income.

High-income taxpayers responded to the higher capital gains tax rates by reducing realizations: gains fell from an average of 3.5 percent of GDP in 1967–1968 to 2.2 percent of GDP in 1970–1978.<sup>5</sup> The number of taxpayers realizing at least \$50 million of capital gains (in 2015 dollars) dropped from an average of 70 per year in 1968–1969 to 22 per year in 1970–1978. In addition, the market for new initial public offerings decreased greatly in the mid-1970s, especially for smaller firms, thought to be partly in reaction to the higher capital gains rates (Fenn, Liang, and Prowse, 1995). In 1978, however, Congress held hearings on capital gains that included testimony by Martin Feldstein (1978) on his research that concluded that because of the historically high rates, more revenue would actually be collected if the capital gains rates were reduced (Feldstein, Slemrod, and Yitzhaki, 1980). The *Wall Street Journal* regularly ran editorials complaining about the 49.875 percent capital gains rate, keeping the issue in the public eye.

In the Revenue Act of 1978, Congress reduced the top capital gains rate to 28 percent by increasing the capital gains exclusion from 50 to 60 percent and repealing the minimum tax on excluded gains. This reduced the average effective tax rate on capital gains by about 18 percent (Office of Tax Analysis, 2016b). In a short-run unlocking response, realizations as a percent of GDP increased by 29 percent in 1979 and capital gains tax revenue increased over 20 percent in spite of the lower rates. Capital gains realizations

---

<sup>4</sup> The amount of earned income eligible for the 50 percent rate was reduced by excluded capital gains and other tax preferences over \$30,000 and a percentage of personal deductions based on the ratio of earned income to AGI. Lindsey (1981) showed that most high-income taxpayers still faced marginal tax rates above 50 percent on earned income due to these clawback provisions.

<sup>5</sup> It is important to note that economic conditions in the 1970s were volatile with periods of economic growth, but also two recessions, an up and down stock market, and rising inflation.

and revenues remained at about the same levels in 1980 in spite of a recession in the first half of the year. Because of the further reduction of the top capital gains rate to 20 percent in mid-1981, longer-term consequences could not be examined.

This episode highlights the ability of high-income taxpayers to plan around high tax rates because much capital income realization is voluntary. Using 1977 estate tax returns matched to income tax returns in the year prior to death, Steuerle (1985) found that the realized rate of return of capital income of the wealthiest decedents was only 2.2 percent of their wealth in the year prior to death. This rate of return was well below the interest rate being paid on savings accounts and about a third of the rate for decedents with under \$500,000 dollars of wealth. These low levels of realizations help explain the unlocking of capital gains in 1979 and afterward.

### III. THE TAX REFORM ACT OF 1986

A series of tax laws and reform proposals set the stage for major tax reform in the mid-1980s. In addition to lowering the top income tax rate from 70 percent to 50 percent, the Economic Recovery Tax Act of 1981 created new opportunities for tax shelters based on generating ordinary losses to offset earned income with the profit taxed at lower capital gains rates in future years (Steuerle, 2004). Concerned with reducing large federal deficits, about half of the revenue losses from the 1981 Act were recaptured in 1982 and 1984 legislation. In early 1984, President Ronald Reagan proposed “an historic reform for fairness, simplicity, and incentives for growth” to “make the tax base broader, so personal tax rates could come down” and requested a Treasury Department plan of action (Reagan, 1984). This resulted in a three-volume study of tax reform options, commonly known as Treasury I. Other major tax reform plans in this period, such as the Bradley-Gephardt and Kemp-Kasten Congressional proposals, also included substantially lower tax rates and broadening the tax base.

Enacted October 22, 1986, TRA86 lowered individual and corporate tax rates, increased corporate tax revenues, repealed or reduced 72 tax expenditures, and addressed tax shelters. The following sections review the key features of TRA86, short and longer-term responses by high-income taxpayers, and the shift of business activity from C corporations to S corporations and other pass-through businesses.

#### A. Key Features of TRA86

The basic philosophy behind TRA86 was to improve the efficiency and fairness of the income tax and provide simplification by lowering statutory tax rates and broadening the tax base.<sup>6</sup> TRA86 reduced individual income tax rates from fourteen rates, ranging

---

<sup>6</sup> A standard public finance result is that the economic distortions from taxes increase in proportion to the square of tax rates.

from 11 percent to 50 percent, to two basic rates of 15 percent and 28 percent.<sup>7</sup> The new rates were phased in with interim rates of 11 percent to 38.5 percent for 1987. The top corporate income tax rate was reduced from 46 to 34 percent. To achieve revenue and distributional neutrality, the legislation broadened the income tax base by repealing or limiting many tax credits, itemized deductions, and other special provisions. TRA86 also repealed the exclusion on net long-term capital gains, increasing the top effective rate on capital gains from 20 to 28 percent. Since the cost of the lower individual income tax rates was not fully offset by base broadening, the revenue shortage was made up by increasing corporate tax revenue (corporate base broadening more than offset the rate reduction), which also helped maintain the progressivity of the tax system. The highest income taxpayers experienced the largest reduction of marginal rates and also the most base broadening.<sup>8</sup>

Another focus of TRA86 was addressing tax shelters, which encouraged looking for tax breaks rather than the most productive investments (Steuerle, 2004). One key provision limited deductions for losses on passive investments until the taxpayer had positive passive income to offset or the investment was sold. This provision was targeted at high-income taxpayers, such as doctors and lawyers, who invested in oil and gas and real estate partnerships that produced deductible ordinary losses and capital gains that were taxed later at a preferential rate when the investment was sold. The 1981 tax cuts had shortened the recovery period for real estate to 15 years (later increased to 18 years for 1985 and 19 years for 1986) and increased accelerated depreciation. Real estate tax shelters took advantage of rapid depreciation rates and interest deductions on leveraged real estate to generate ordinary losses that could offset income otherwise taxed at a 50 percent rate. After a certain point, when depreciation deductions declined, investors had an incentive to “churn” their investment by selling (at the preferential 20 percent capital gains rate) to a new investor who could again take advantage of accelerated depreciation (Burman, Neubig, and Wilson, 1987). TRA86 addressed this shelter by lengthening the depreciation periods from 18 years to 27.5 years for residential rental property and 31.5 years for other rental property and increasing tax rates on capital gains.

In addition, immediate deduction of rental losses was capped at \$25,000 and phased out for taxpayers with incomes over \$150,000. Rental losses were also subject to new rules limiting the use of passive losses to offset other income. The reduction in tax rates further reduced the incentives to seek out tax shelters. Most of the effect of these provisions was on taxpayers who would otherwise have been in the top income and tax brackets (Samwick, 1996).

---

<sup>7</sup> A 33 percent “bubble rate” was created by the phaseout of the benefit of the 15 percent rate. This made the average and marginal tax rates a flat 28 percent of taxable income over the phaseout (\$149,000 for married couples filing jointly).

<sup>8</sup> Provisions benefitting low-income households included substantial increases in the personal exemption and standard deduction, and increases in the rate and base and indexing of the Earned Income Tax Credit.

## B. Short-Term and Longer-Term Responses

The substantial changes to tax rates and bases and the timing of the enactment provided incentives and an opportunity for high-income taxpayers to react before the new law took effect. Perhaps the best known response was the accelerated realization of capital gains to avoid the top rate increase from 20 to 28 percent. Long-term capital gains nearly doubled from 3.8 to 7.0 percent of GDP (from \$166 billion to \$319 billion) in 1986 and then declined to less than 2 percent of GDP by 1990 (Office of Tax Analysis, 2016b).<sup>9</sup>

In addition, TRA86 created incentives to shift ordinary income and deductions across years and get out of previously advantageous tax shelter investments. During the transition to lower rates, taxpayers had an incentive to defer wages and other ordinary income from 1986 to 1987 and from 1987 to 1988. Both aggregate and individual level data show evidence of such shifting across years.

Studies also found longer-term responses to lower ordinary tax rates. Using a panel of tax returns for 1985 and 1988, Feldstein (1995) estimated an elasticity of taxable income (ETI) of 1.3 with respect to the net of tax rate.<sup>10</sup> After controlling for changes in the tax base and taxpayer characteristics in a panel that included a large number of high-income taxpayers, Auten and Carroll (1999) estimated an ETI in the range of 0.4 to 0.7. Eissa (1995) found evidence that the labor supply of high-income married women subject to high tax rates increased as a result of the lower rates under TRA86. Kumar (2008) estimated that the labor supply of men increased by 2 percent and that TRA86 reduced the deadweight loss of men in the top income quartile by 19 percent. Moffitt and Wilhelm (2000) found no effect of TRA86 on hours of work of high-income men and speculated that this was because most were already working long hours (some over 3,000 hours per year).<sup>11</sup>

Longer-term effects on reported business income can be seen in tax return data. Total net income of partnerships, which had been negative for most of the 1980s, went from -\$15 billion in 1986 to positive \$20 billion in 1987 and \$34 billion in 1988. Similarly, the portion of partnership income reported on individual returns went from -\$14 billion to positive \$7 billion and \$22 billion over this period.<sup>12</sup> In contrast, the large losses in net rental income on both partnership and individual tax returns (\$10 billion and \$20 billion, respectively) in 1985 declined only slowly after 1987 and net rental income

<sup>9</sup> Realizations of long-term gains did not exceed 3.8 percent of GDP again until after the capital gains rate reduction in 1997.

<sup>10</sup> In general, an ETI greater than one means that reducing tax rates would result in higher revenues. With progressive tax rates, however, the breakeven point may differ from 1.0. The ETI also provides a rough indicator of the proportion of the static revenue change that is offset by behavioral responses.

<sup>11</sup> On the other hand, Showalter and Thurston (1997) found that the work hours of self-employed physicians were sensitive to tax rates prior to TRA86—a 3 percentage point higher marginal tax rate resulted in about one hour less per week. Physicians who were employees had no discernable sensitivity to tax rates.

<sup>12</sup> Some partnership income is distributed to corporations, to other partnerships, and to pension funds and other non-profits.

only became positive in 1993. This slow decline likely reflects the gradual exit from or replacement of pre-1986 investments. However, this does not include the effects of the new passive rules that prevented high-income passive investors from deducting losses on real estate and other passive investments until they either realized an equal amount of passive income or sold the investment. In 1988, passive loss rules prevented the deduction of \$29.7 billion of losses, of which \$10.8 billion was rental losses. By 1992, these disallowed losses, including disallowed losses from prior years that were still disallowed, reached peaks of \$71.4 and \$31.4, respectively.

Charitable organizations were concerned about effects on charitable contributions because TRA86 increased the price of giving, reduced the numbers of itemizers who could claim deductions, and made donations of appreciated property a tax preference.<sup>13</sup> Total charitable deductions did not decline following TRA86, possibly because of intensified fundraising efforts by charities. But museums reported that donations of works of art, which generally had appreciated in value, fell by over one-third and did not recover until after the tax preference was cut back and the top income tax rate increased in 1991 which reduced the price of giving (Auten, Clotfelter, and Schmalbeck, 2000). Other deductions by the highest income taxpayers for donations of appreciated property also declined following TRA86.

As has been noted by Feenberg and Poterba (1993), Slemrod (1994), and others and quantified in Auten and Splinter (2016), another long-term effect of TRA86 was to make tax return based estimates of the U.S. income distribution appear much more unequal starting in 1988. This is because much of the base-broadening was targeted at wealthy taxpayers whose tax shelters were closed down or, as discussed in the following section, whose tax incentives for how to organize their business changed substantially in favor of pass-through entities.

TRA86 was landmark legislation that reduced the deadweight loss from tax-induced distortions and unproductive investments by lowering tax rates and reducing the dispersion of effective tax rates on different types of income and investments. Most of the widely marketed tax shelters were no longer viable: lower rates and equalizing ordinary and capital gains rates removed much of the incentive for receiving income in the form of capital gains and reduced the value of tax shelters and other tax avoidance strategies. TRA86 reduced tax expenditures by 40 percent or \$190 billion, of which 60 percent was due to lower tax rates and 40 percent to base broadening (Neubig and Joulfaian, 1988). While many tax expenditures remained, the lower tax rates reduced the potential gains from remaining shelter and tax avoidance possibilities.<sup>14</sup>

---

<sup>13</sup> For taxpayers that itemize deductions, the price or cost of giving \$1 in cash is  $(1-t)$ , where  $t$  is the marginal tax rate. The cost of giving appreciated property is further reduced to  $(1-t-b\times tcg)$  where the additional term reflects the capital gains tax saved by not having to sell the asset and pay the capital gains tax on the amount of appreciation ( $b$ ). Donations of appreciated property could put the donor on the Alternative Minimum Tax (AMT), where the appreciation would be taxable at a 21 percent rate. Tax planning became more complex as taxpayers had to consider whether the gift would subject the taxpayer to the AMT.

<sup>14</sup> Additional analysis of TRA86 is provided in Steuerle (2004), Auerbach and Slemrod (1997), Slemrod (2000), and the Summer 1987 and Winter 1992 issues of the *Journal of Economic Perspectives*.

### C. Effects on Business Organization and S Corporation Elections

TRA86 changed the economic incentives for organizing a business as a C corporation or as a passthrough entity (S corporation, partnership or sole-proprietorship). Before TRA86, the top individual tax rate was higher than the top corporate tax rate (50 percent versus 46 percent), allowing sheltering in C corporations (Gordon and Slemrod, 2000). After TRA86, the top individual tax rate was less than the top corporate tax rate (28 percent versus 34 percent). This rate inversion combined with higher corporate tax burdens from base-broadening and the double tax on C corporation income, precipitated a shift into passthrough entities.<sup>15</sup> IRS Statistics of Income integrated business data show that the fraction of business receipts from passthrough entities increased from 16 to 24 percent between 1986 and 1988. The shift to pass-through businesses continued with their share of receipts increasing to 39 percent by 2012.

Of particular interest is the extent to which some corporations and their owners responded to TRA86 by electing S corporation status for their businesses. In addition to tax rate and tax base changes, TRA86 repealed the “General Utilities” doctrine and instituted a built-in gains tax.<sup>16</sup> As of January 1, 1987, C corporations could no longer distribute appreciated property (such as through a liquidation or merger) without paying a corporate-level tax on the gain at the top corporate tax rate or waiting through a 10-year holding period.<sup>17</sup> Conversions from C to S corporations could avoid the built-in gains tax on distributions made if taxpayers acted quickly (Plesko, 1994).

As shown in Figure 3, the number of newly electing S corporations more than doubled, jumping from about 108,000 in 1985 to nearly 270,000 in 1987. After that, the number of new elections hovered around 250,000 per year until another jump to over 317,000 in 1997 in response to the Small Business Job Protection Act of 1996. This Act broadened the scope of S corporations by increasing the allowable number of shareholders from 35 to 75, allowing S corporations to own subsidiary corporations, allowing certain banks to elect S corporation status, and allowing certain tax-exempt organizations and electing trusts to be shareholders (Sicular, 2014).

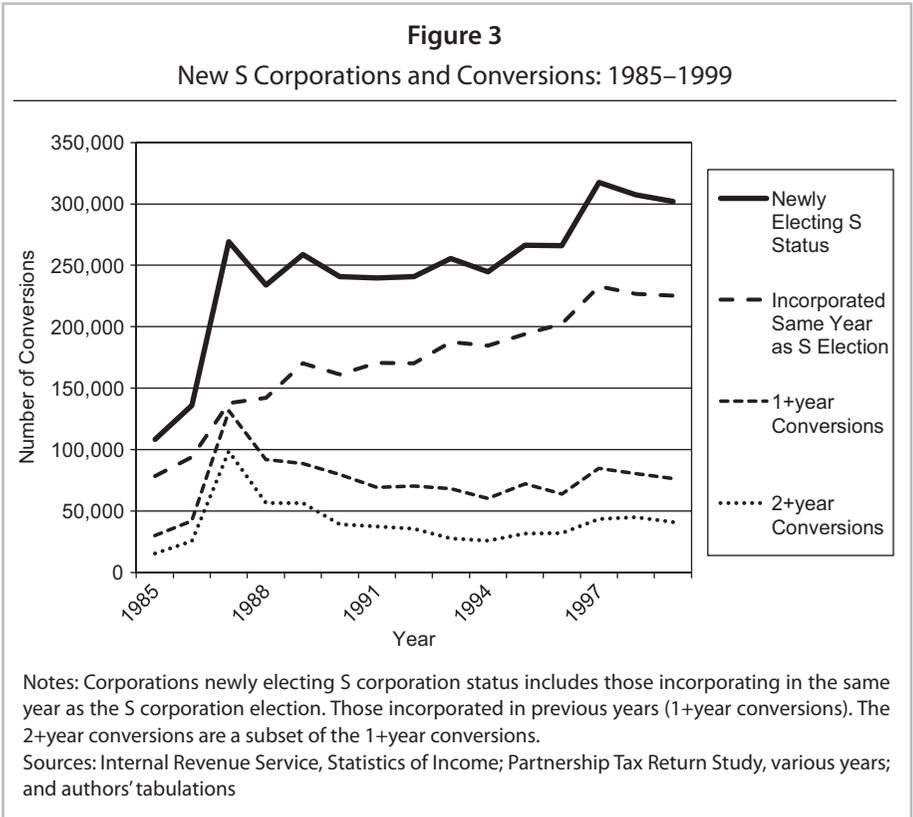
How many of these newly-electing S corporations were conversions from C corporations and how many represented new corporate formations? In all years except 1987 and 1988, two-thirds to three-quarters of new S elections had also incorporated that same year (second line in Figure 3). In 1987 almost half — 49 percent — of the new S

---

<sup>15</sup> Corporate income is taxed under the corporate income tax and a second time at the individual level when dividends are paid or capital gains realized from selling stock. Some owners of closely held C corporations avoided the double tax by paying out profits as wages, retirement plan contributions, or interest to the owners so as to minimize any corporate tax. Such sheltering was likely even more important earlier when the top individual rate was 70 percent. TRA86 also increased the maximum long-term capital gains tax rate from 20 to 28 percent, which may have further lowered the value of C corporation retained earnings relative to pass-through income.

<sup>16</sup> The “General Utilities” doctrine refers to *General Utilities Co. v. Helvering*, 296 U.S. 200 (1935).

<sup>17</sup> Taxpayers could avoid the tax on built-in gains if they waited 10 years after the date of the conversion to an S corporation. Congress temporarily shortened this to seven years and then five years. In 2015, Congress made the five-year requirement permanent, making future conversions to an S corporation less burdensome.



elections were made by firms who had incorporated in previous years. However, many of these “conversions” had just been incorporated in the year preceding the S election, so they had little if any time to operate as a C corporation. A better indication of conversions is firms that incorporated two or more years before they made their S elections (the lowest line in Figure 3). In 1988, for example, 24 percent (56,600 of 234,000) of the returns electing S status had incorporated by 1986.

TRA86 was a triggering event that accelerated the shift to organize businesses as pass-through entities to avoid the double tax on corporate income. The pass-through sector increased from 21 percent of business net income in 1980 to 51 percent in 2013 (Nelson, 2016).

**IV. OMNIBUS BUDGET RECONCILIATION ACT OF 1993**

The 28 percent top tax rate enacted in TRA86 was in effect for only three years: 1988 through 1990. Some analysts and politicians thought that the 28 percent capital gains rate was too high, while others thought that the 28 percent top ordinary rate was too

low. Before long, both groups were able to at least partially achieve their goals: the top ordinary rate was increased in 1991 and 1993 and the capital gains rate was reduced to 20 percent in mid-1997.<sup>18</sup>

The Omnibus Reconciliation Act of 1993 (OBRA93) substantially increased ordinary income tax rates for the highest income taxpayers. A new 36 percent tax rate was imposed on taxable income over \$140,000 for married taxpayers filing jointly (\$115,000 for single tax filers) percent and a 39.6 percent rate on taxable incomes over \$250,000.<sup>19</sup> The alternative minimum tax rate increased from 24 percent to new rates of 26 and 28 percent. The maximum rate on capital gains remained at 28 percent because previous experience suggested that higher rates would generate little or no additional revenue. As an incentive to invest in small businesses, a new capital gains provision provided a 50 percent exclusion on up to \$10 million of capital gain for original issue stock in qualified small businesses held for at least five years.<sup>20</sup>

In addition to the increase in tax rates, OBRA93 included other provisions that affected executives and other high-income taxpayers. A new provision capped the deduction for top executive compensation in publicly traded companies at \$1 million unless it was based on performance goals and met certain requirements. Other provisions limited the ability of taxpayers to reduce taxable income in response to the higher rates. These included eliminating deductions for club dues, spousal travel, and lobbying expenses, limiting deductions for business meals and moving expenses, reducing the maximum contributions for retirement savings plans, and preventing the conversion of ordinary income into capital gains in certain cases. The cap on income subject to the 2.9 percent payroll tax for the Medicare Health Insurance (HI) Fund, previously increased to \$125,000 in 1991, was completely removed beginning in 1994.

## A. Short-Term and Longer-Term Responses

Many key components of OBRA93 were publicized in 1992 (Kayle, 1992). President Bill Clinton had made promises during his campaign to increase taxes on high-income taxpayers.<sup>21</sup> In addition, Congress passed a tax bill in March 1992, which was vetoed by President Bush, but included tax rate increases that would likely be included if Clinton were elected.

---

<sup>18</sup> Effective in 1991, the top individual tax rate was increased from 28 to 31 percent. In addition, there was some reversal of base broadening starting in 1987 as Congress provided exceptions to new rules or introduced new tax expenditures.

<sup>19</sup> Including the effect of the 3 percent Pease phaseout of itemized deductions, the top effective marginal tax rate was 40.788 percent ( $39.6 + 0.03 \times 39.6$ ). The rest of the rate schedule remained unchanged. The bill also included major expansion of the earned income tax credit to benefit low-income households and middle class tax relief in the form of a new child tax credit.

<sup>20</sup> The actual tax incentive was muted due to certain strict requirements and because a portion of the excluded gain was subject to tax as preference income under the AMT.

<sup>21</sup> The basic elements of the Act, a middle-class tax cut and an increase in high-income income tax rates (including a "millionaires" surtax), were included in a widely circulated Clinton campaign book. Auten and Kawano (2011b) provide more details on the key events leading up to the passage of OBRA93.

Following the 1992 election, taxpayers had nearly two months to make end-of-year changes. Tax planning ideas circulated and appeared in print. Thus, high-income individuals had incentives and opportunities to shift their income from 1993 to 1992 and defer charitable contributions and other deductions until 1993 to reduce their tax liabilities. The campaign promise of a middle-class tax cut meant those with lower incomes did not have these incentives.

The uncapping of income subject to the 2.9 percent HI portion of the payroll tax beginning in 1994 created a second opportunity for high-income taxpayers to reduce their tax liabilities by accelerating wage and self-employment income from 1994 to 1993. This tax change would be particularly salient for taxpayers with large amounts of self-employment income because they would be subject to the full 2.9 percent payroll tax, though half of this amount could be claimed as an above the line deduction. High wage recipients would only see the effects of a 1.45 percent HI tax on their pay statements. While economic theory suggests that their employers would reduce their gross wages by the employer's share of the tax, this effect would be less visible and perhaps less salient to wage earners.

The transitory acceleration of wage income ahead of the two tax rate increases was large enough to create two visible spikes in the otherwise smooth trend of monthly private sector wages reported in the national income accounts. Auten and Kawano (2011b) estimated that over \$15 billion of wages and bonuses were shifted from 1993 to December 1992 in response to the top tax rate increase. Similar amounts were shifted from 1994 to December 1993 in response to the uncapping of the HI tax base. Feldstein and Feenberg (1996) provided early evidence that high-income taxpayers responded by decreasing their taxable income, with an ETI of 0.74. Since data were only available for 1993, the first year of higher rates, this elasticity primarily reflects transitory responses.

When additional years of data became available, it became possible to differentiate short-term shifting from more permanent responses. But researchers have drawn different conclusions about whether the responses were primarily shifting ahead of the rate increases or longer-term. Using tax return data through 1995, Sammartino and Weiner (1997) found that reported incomes for high-income taxpayers, especially wages and salaries, fell in 1993, but concluded that the changes may reflect a shift of income into 1992 in anticipation of the rate increases rather than a permanent response. Similarly, Goolsbee (2000) concluded that the response of executive salaries was almost entirely a short-run shift in the timing of compensation from a large increase in the exercise of stock options by the highest-paid executives. He estimated that the short-run elasticity with respect to the net of tax share exceeded one, but the longer-run elasticity was at most 0.4 and probably closer to zero. Using a panel of tax returns and controlling for occupation and industry, Carroll (1998) estimated a long-run ETI of approximately 0.6 for high-income taxpayers. Giertz (2007, 2010) found that ETI was lower in the 1990s (0.3 for three-year changes) than for the 1980s when tax rates were higher.<sup>22</sup>

---

<sup>22</sup> As discussed in Auten and Kawano (2011a) and Giertz (2010), estimates of taxable income elasticities for the 1993 Act are complicated and potentially biased due to the two-part rate increases in 1993 and 1994 and the heterogeneous responses of different types of taxpayers.

The \$1 million cap on corporate deductions for non-incentive based executive compensation increased the use of incentive pay such as executive stock options (Rose and Wolfram, 2002). Gorry et al. (forthcoming) pointed out that the use of stock option awards offered a way to defer taxation on current executive compensation and argued that such tax-induced deferral creates efficiency costs. They found that stock options increased from 18 percent of total compensation in 1992 to 26 percent by 1996 and reached a peak of 37 percent in 2001. Salaries, which were affected by the new \$1 million cap, declined from 52 percent of compensation to 41 percent by 1996 and continued declining to a low of 35 percent in 2001.<sup>23</sup>

## B. Results from Tax Panel Data

This section presents additional evidence on the responses of different types of high-income taxpayers to OBRA93 using a large panel of tax returns.<sup>24</sup> The analysis considers executives and also taxpayers with S corporation or partnership income averaging at least \$200,000 for the period 1990 to 1995. The \$200,000 threshold approximately represents the top 1 percent of households. Returns with \$1 million and over are approximately the top 0.1 percent of taxpayers, those likely to be most responsive to the 1993 Act because of the proposed “millionaires surtax.”<sup>25</sup>

As noted above, executives took advantage of the opportunity to shift salary and bonus income ahead of the tax increase, first from 1993 to 1992 and then from 1994 to 1993. Among about 3,100 non-S corporation executives whose average wages in 1990–1995 exceeded \$1 million, average wages doubled from \$1.3 million to \$2.6 million in 1992, then fell back to the 1991 level in 1994. In 1995, average wages jumped to over \$2 million, suggesting that the main response of top executive salaries was shifting ahead of the income and payroll tax increases. The salaries of executives with wages of \$500,000 to \$1 million increased about 60 percent in 1992 but in 1994 did not fall all the way back to 1991 levels, perhaps reflecting the younger average age of this group. Another response of these two groups was to shift their interest bearing investments toward tax-exempt securities, roughly doubling their tax-exempt share to half of total interest by 1995. A significant number of executives with no previous

---

<sup>23</sup> Gorry et al. (forthcoming) point out that the reversal of these trends in 2001 coincided with the phased-in reduction in top income tax rates enacted in 2001 and 2003 and therefore likely reflected a response to the lower tax rates. They also note that restricted stock grants also provide deferral, but did not increase because they would be subject to the \$1 million cap on corporation deductions for non-incentive compensation. Auten, Carroll, and Gee (2008) and other papers in that issue of the *National Tax Journal* provide a discussion of the 2001 and 2003 tax cuts.

<sup>24</sup> The panel includes primary and secondary taxpayers on about 87,000 non-dependent 1987 tax returns and a small refreshment sample. The panel contains individual tax returns from 1987 to 1996 and is stratified to oversample high-income tax returns. Nunns et al. (2008) and Carroll (1998) provide more detailed descriptions.

<sup>25</sup> The top rate ultimately applied to taxable income over \$250,000 regardless of marital status. The analysis in this section is updated from the research reported in Auten and Kawano (2011a, 2011b) and related presentations.

S corporation income, started receiving S corporation income after 1993, suggesting another tax planning response.

Most high-income owners of S corporations are likely to have substantial control over whether they receive compensation as wages or distributions of net S corporation income.<sup>26</sup> In the early 1990s, about 80 percent of S corporations had only one or two shareholders and at least 95 percent had five or fewer shareholders. Thus, it is important to examine the combined wages and S corporation income of this group. Among taxpayers with at least \$1 million in average combined wages and S corporation income over the 1990–1995 period, wages increased by over 40 percent in 1992 and then fell 13 and 21 percent in the next two years. S corporation income received by these taxpayers, which was not subject to the uncapped HI tax, increased from about 47 percent in 1990 and 1991 to about two-thirds of combined salaries and distributions from the S corporation by 1994. While individual income and payroll taxes were reduced by this tax planning, total taxes more than doubled by 1994 as compared to 1991 in spite of the behavioral response. In response to the new capital gains rate differential, long-term capital gains rose to four times the level reported in 1989 and 1990 with most of the increase accounted for by pass-through distributions from their S corporation or other investments. The tax-exempt interest of this group also doubled over this period but only accounted for less than one-third of their total interest income.

Other high-income taxpayers also responded to the higher tax rates in various ways. High-income doctors and lawyers seemed to do little shifting of income into 1992, but the share of S corporation income increased in both groups in 1994 in apparent response to the uncapping of the HI tax. Entrepreneurs, wage stars (e.g., highly paid athletes, movie actors, television personalities, etc), and those in finance with incomes over \$1 million shifted substantial amounts of income into 1992. Those with large amounts of partnership income shifted some income to 1992, and then decreased active partnership income and self-employment income beginning in 1994. A simple computation suggests that the payroll taxes of these taxpayers were at least 10 percent lower than if their self-employment earnings had increased at the rate of inflation. In general, the evidence suggests that high-income taxpayers also increased the shares of income shares from tax-favored capital gains and tax-exempt interest and renewed their interest in tax sheltered limited partnerships (Samwick, 1996) to reduce the impact of higher tax rates.

### C. Partnerships

Partnership assets and income grew rapidly in the early 1990s, especially for financial partnerships, as shown in Table 1. Raising the top ordinary rate increased the demand for investments that generated capital gains or other tax-preferred income. Distributions of long-term capital gains doubled in 1993 and then doubled again in 1995. This likely reflects the early years of private equity and other investment funds, with real-

---

<sup>26</sup> S corporation executives were identified using the occupation provided by the taxpayer on the 1040 and the presence of significant S corporation income by 1989 to focus on on-going S corporations.

**Table 1**  
**Assets and Distributions of Finance Industry Partnership Returns, 1985–1996**

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Number of returns (1,000s)	121.8	109.2	105.7	114.4	108.3	99.4	103.3	103.4	101.5	113.0	117.4	141.0
<i>Panel A: Assets (\$Billions)</i>												
U.S. government securities	21.5	25.7	18.5	10.9	11.1	18.6	37.0	42.1	33.4	53.7	37.0	50.1
Tax-exempt securities	NA	NA	NA	NA	1.2	2.6	3.8	5.0	16.9	16.7	17.7	18.1
Investment assets	75.1	78.6	98.2	105.1	133.0	151.9	216.2	270.9	375.2	441.7	630.4	885.8
Other current assets	34.9	32.9	48.0	35.6	48.6	48.9	67.4	90.8	123.4	133.6	172.9	238.9
Mortgages	12.7	14.3	16.9	16.6	20.4	16.1	17.4	17.1	18.6	17.1	17.4	21.2
Depreciable assets	11.7	11.3	6.4	6.8	7.4	9.0	9.5	10.1	11.3	12.7	14.1	18.4
Land	10.1	10.9	11.0	13.0	12.3	12.6	11.9	13.1	12.6	13.4	13.0	14.9
Other assets	70.4	59.1	147.5	115.3	123.9	89.1	97.3	103.5	136.4	175.3	225.7	353.9
Total assets	236.5	232.9	346.6	303.3	357.8	348.6	460.5	552.6	727.9	864.3	1,128.3	1,601.3
<i>Panel B: Distributions to Partners (\$Billions)</i>												
Tax-exempt interest	NA	0.6	1.0	1.8	2.5	2.1						
Ordinary business income	1.4	1.7	4.3	2.9	1.7	1.9	2.7	5.2	7.5	5.9	7.8	23.1
Interest	1.5	1.8	4.2	8.9	8.6	9.1	9.8	8.1	8.6	11.3	20.9	22.7
Dividends	1.1	1.2	2.1	2.4	2.6	2.3	2.3	2.0	2.5	3.7	4.4	7.5
Short-term capital gain/loss	1.2	1.8	0.4	1.9	7.9	3.2	2.6	2.7	4.5	-1.0	3.9	7.7
Long-term capital gain/loss	6.2	8.9	7.9	7.5	6.8	6.6	4.0	6.3	12.1	13.9	25.7	43.6

Notes: NA indicates that the data is not reported.

Sources: IRS Statistics of Income partnership files and authors' calculations.

ized capital gains lagging a few years behind the growth of investments. Investment assets increased by more than one-third in 1991 (from \$345 billion to \$477 billion) and continued to grow rapidly throughout this period.<sup>27</sup> While they remained only a small percentage of investment assets, partnership holdings of tax-exempt bonds more than tripled between 1992 and 1993, suggesting that investment partnerships recognized the demand for these securities as a result of the increase in ordinary tax rates. Increases in investment in residential property and distributions of capital gains by limited real estate partnerships starting in 1993 were another sign of increased tax sheltering activity.

## V. AMERICAN TAXPAYER RELIEF ACT OF 2012 AND NET INVESTMENT INCOME TAX

Many of the reductions in tax rates enacted in the 2001 and 2003 Bush tax cuts were extended for two years with the Tax Relief Act of 2010 enacted in mid-December 2010, and again set to expire at the end of 2012.<sup>28</sup> The American Taxpayer Relief Act (ATRA), introduced in July 2012, permanently extended most tax cuts but allowed top tax rates to increase. Some provisions and income thresholds were only decided late in 2012 and the law was not actually passed and signed until January 2013. Therefore, high-income taxpayers could not plan with certainty for the new law. Indeed, some may have held out hope for a further extension of prior law. In addition, two new taxes on high-income earners in the Affordable Care Act (ACA), enacted in 2010, also became effective in 2013.

To examine how high-income taxpayers responded to these tax changes, we created a panel of the population of top tax units for 2010 through 2014. As discussed in the following sections, the data show evidence of both short-term and longer-term responses, including increases in active S corporation income, which is not subject to the new ACA taxes.

### A. Tax Changes in 2013

Among the provisions most affecting high-income taxpayers were the return of the 39.6 percent top statutory rate, the Pease 3 percent phaseout of itemized deductions, and a 20 percent top statutory tax rate on capital gains.<sup>29</sup> Two new taxes on high-income

<sup>27</sup> Fenn, Liang, and Prowse (1995) estimated that as of 1994, private equity had about \$70 billion of assets and venture capital another \$30 billion and that 80 percent of this was in the form of limited partnerships.

<sup>28</sup> Officially, the Economic Growth Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA).

<sup>29</sup> Other provisions of ATRA extended many expiring provisions and made many of them permanent. These included the 10, 25, and 33 percent tax rates, the \$1,000 child credit and refundability, marriage penalty relief in the form of the standard deduction and 15 percent bracket thresholds being twice as high for married taxpayers filing jointly than for single taxpayers, EITC expansion and simplification, various education provisions, and the itemized deduction for sales taxes. In addition, ATRA permanently extended the zero percent rate on long-term capital gains and qualified dividends in the 15 percent tax bracket or below.

earners enacted in ACA further increased top tax rates in 2013. The combined effects of these tax rate increases were substantial. In 2013, top individual marginal tax rates increased by about 7 percentage points on earned income. The top effective individual marginal rate on capital gains and qualified dividends increased from 15 percent to over 25 percent. This 10 percentage point increase was larger than the capital gains rate increase from 20 to 28 percent in TRA86. Based on prior experience, such large tax rate increases could be expected to generate both shifting responses and some longer-term responses.

ATRA included modest relief for some higher income taxpayers. For example, the second highest rate would increase only to 35 percent rather than 36 percent. In addition, there was partial relief from marriage penalties. The threshold for the top tax bracket was increased modestly from \$398,350 to \$450,000 for married taxpayers filing jointly, but left unchanged for single taxpayers and heads of household. The thresholds for the 3 percent phaseout of itemized deductions were increased.<sup>30</sup> ATRA also permanently extended the exclusion of up to \$10 million in capital gains on qualified small business stock that primarily benefits high-income taxpayers who are successful entrepreneurs or investors.

The ACA included two taxes on top incomes: the 0.9 percent Additional Medicare tax and the 3.8 percent Net Investment Income Tax (NIIT). In combination with the existing 2.9 percent Medicare payroll tax, the Additional Medicare tax applies a rate on labor income that mirrors the NIIT rate. These taxes apply to applicable income over thresholds of \$250,000 for joint filers and \$200,000 for single filers, but the thresholds are not indexed for inflation.<sup>31</sup> The Additional Medicare tax base includes wages, salaries, and self-employment income. The NIIT base is the lesser of net investment income and the amount of modified adjusted gross income over the threshold. Net investment income includes capital gains, interest, dividends, rental and royalty income, and certain other passive income, such as income from businesses in which the taxpayer does not materially participate (principally partnerships and some S corporations).

Active S corporation income, that is, distributions of profits to owners materially participating in the business, is exempt from both ACA taxes. Active income of certain LLC members and limited partners materially participating in the business may also escape both taxes. Note that active partnership income is generally subject to SECA, and so also to the Additional Medicare Tax. Office of Tax Analysis (2016a) discusses

---

<sup>30</sup> Thresholds were increased to \$250,000, \$275,000, and \$300,000 for single, head of household, and joint returns. Otherwise, the 2013 thresholds would have been \$178,150, \$222,700 and \$267,200, respectively.

<sup>31</sup> The lack of indexing means that while only a small percentage of taxpayers are currently affected, increasing numbers will be affected by the complexity and tax planning considerations of the NIIT. A similar issue arose when the Alternative Minimum Tax was not indexed in the 1990s and eventually Congress passed annual "patches" to keep millions of taxpayers from being subject to the tax. While the NIIT was enacted to equalize the treatment of investment income with the payroll taxes on earned income, the additional revenues are not allocated to the Medicare Trust Fund.

gaps in the definitions of income subject to The Additional Medicare Tax and the NIIT. Kosnitzky and Grisolia (2013) discuss how S corporation shareholders may be able to avoid both the 3.8 percent NIIT and Medicare taxes. In particular, they suggest that some owner-employees could use “fresh start” regulations to regroup their business activities and convert passive income to active income.<sup>32</sup>

Top marginal tax rates including the combined effects of individual, corporate, and payroll taxes for various types of income are summarized in Table 2. Overall, top tax rates increased between about 6 to 10 percentage points in 2013 depending on the type of income. This created new incentives. For example, the Additional Medicare Tax made active S corporation and non-taxable income have an even lower top rate relative to labor income in 2013 (compare the last two rows of Table 2).

To examine the effects of the 2013 increase in tax rates, a five-year panel was created from IRS administrative data on Form 1040 for the population of tax returns. Tax units are based on 2012 primary Taxpayer Identification Numbers (TINs, usually Social Security Numbers) and merged on primary TINs in other years. The IRS Statistics of Income (SOI) tax data are used when available, including over 35,000 tax returns each year with incomes over about \$7.5 million in the SOI 100 percent sampling strata. Marginal tax rates are calculated using the detailed tax calculator from the Individual Taxation Model of the Joint Committee on Taxation (2015).

## B. Short-Term Income Shifting

In response to the higher tax rates, the top 0.1 percent of taxpayers appears to have accelerated several forms of taxable income ahead of the 2013 tax rate increases (Figure 4). While the most noticeable shift is the acceleration of capital gains into 2012, similar patterns are found for wages, S corporation and partnership income, self-employment income, and dividends. Similarly, Pérez Cavazos and Silva (2015) found that among other actions, firms managed by tax-minded executives accelerated dividends from 2013 to 2012 to avoid tax increases. While the changes are obscured due to their smaller scale, taxable retirement income (pensions, annuities, and IRA distributions) reported by the top 0.1 percent increased from \$6 billion to \$12 billion between 2010 and 2012 and then fell to \$4 billion in the next two years.

Another way of looking at short-term shifting is by calculating taxable income elasticities between 2012 and 2013. As the tax rate changes differed for various income sources, income changes are calculated by source: labor, active S corporation, capital,

---

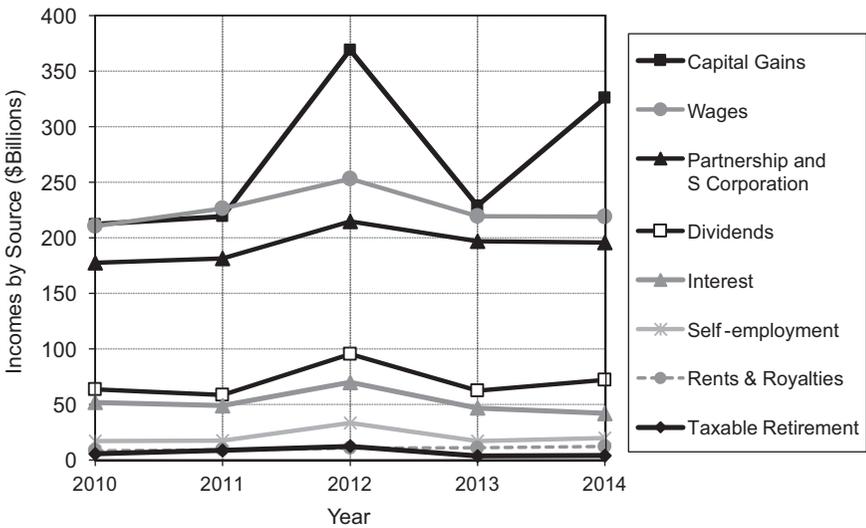
<sup>32</sup> An example of regrouping would be a physician with separate S corporations for a basic practice and an outpatient surgery center. Assume that prior to 2013, the physician treated income from the basic practice as active and income from the outpatient center as passive. The passive income might have been desired to allow deduction of passive losses on other investments. Grouping the two businesses together in 2013 and treating all of the income as active would avoid both the 3.8 percent NIIT and the 3.8 percent from SECA and the Additional Medicare Tax.

**Table 2**  
**Top Marginal Tax Rates by Income Source, 2012–2013**

	Labor	Non- preferred Investment	Preferred Investment	Miscellaneous	Active S Corporation	Non- taxable
<i>Panel A: 2012 Tax Rates</i>						
Individual	35.0	35.0	15.0	35.0	35.0	
HI	2.4					
C corporation		26.3	26.3			
Total	37.4	52.1	37.4	35.0	35.0	0.0
<i>Panel B: 2013 Tax Rates</i>						
Individual	39.6	39.6	20.0	39.6	39.6	
HI	2.4					
Additional Medicare Tax	0.9					
NIIT		3.8	3.8	3.8		
Phaseout	[1.4]	[1.4]	[1.4]	[1.4]	[1.4]	
C corporation		26.3	26.3			
Total	44.3	59.3	44.9	44.8	41.0	0.0
<i>Panel C: Change in Tax Rates</i>						
Total	6.9	7.2	7.5	9.8	6.0	0.0
<i>Panel D: Difference in Tax Rates from Labor</i>						
2012		14.7	0.0	-2.4	-2.4	-37.4
2013		15.0	0.6	0.5	-3.3	-44.3

Notes: Top marginal rates are shown, where Medicare taxes (HI) include both the employer and employee portions and income covered under SECA. For self-employment income, the marginal rate after deductions is 2.4 percent = 2.9 percent  $\times$  (1-0.9235  $\times$  0.5  $\times$  0.396). The marginal rate is also about 2.4 percent for wages including the employee's 1.45 percent and the after-tax cost for an employer at a 35 percent corporate tax rate; Phaseout marginal tax rates come from the JCT Individual Tax Model for the top 0.1 percent of tax returns, are based on wages, and placed in brackets as they vary by taxpayers. Labor includes sources subject to FICA or SECA taxes: wages, salaries, tips, self-employment income, and farm income. Non-preferred investment income includes short-term capital gains, non-qualified dividends, and interest income. Preferred investment income includes long-term capital gains and qualified dividends. Miscellaneous income includes taxable interest, some retirement income, passive passthrough income, and other sources. Active S corporation income includes certain active partnership income not subject to the NIIT, FICA, or SECA. Non-taxable income includes tax-exempt interest, Roth IRA distributions, and the non-taxable portions of pensions, annuities, and Social Security benefits. The C corporation marginal tax rate is based on Congressional Budget Office (2005) and total investment tax rates are the C corporation rate plus the residual times the individual rate.

**Figure 4**  
 Top 0.1 Percent Incomes by Source (Five-Year Income Group)



Notes: Income is adjusted gross income plus adjustments (including capital gains). Income thresholds are set by income between 2010 and 2014. Partnership and S corporation and rents and royalties are net incomes. Self-employment income includes Schedule C, Schedule F (farm), and other income. All incomes are indexed to 2014 using the CPI-U-RS.  
 Sources: IRS administrative data and authors' calculations

and other.<sup>33</sup> Following a 2012 increase, total top incomes and most income sources declined, although active S corporation income continued to increase. The overall short-term elasticities of income are quite high: 2.6 for the top 0.1 percent, 0.9 for the rest of the top 1 percent and 0.5 for the next percentile (Table 3).<sup>34</sup> With the same method but using cross-sectional rather than panel data, Saez (2015) estimates smaller elasticities of

<sup>33</sup> These income groups differ from the groups in Table 2. For example, “Capital” in Table 3 consists of all capital gains and dividends (non-preferred and preferred), as almost all of these are taxed at the preferential rate, while interest is included in “other” as it is taxed at higher rates. S corporation amounts in Tables 3 and 4 are calculated by multiplying net passthrough income (Schedule E line 32) by the fraction of active S corporation and active partnership net income (included in Schedule E line 29a) in 2011–2013 overlapping panels of IRS SOI individual tax samples. Actual fractions may differ in the five-year panel.

<sup>34</sup> The marginal tax rates for total income are a weighted average of the marginal tax rates for each income type.

**Table 3**  
Short-Term Income Elasticities, 2012–2013

	Top 0.1 Percent		P99–99.9		P98–99	
	2012	2013	2012	2013	2012	2013
<i>Panel A: Income (\$Billions)</i>						
Labor	345	299	675	649	393	390
S corporation	116	118	97	104	25	27
Capital	465	292	180	135	48	44
Other	143	91	117	89	61	57
Total	1,068	799	1,070	978	527	519
<i>Panel B: Marginal Tax Rates</i>						
Labor	36.6	43.3	35.0	41.4	38.2	39.8
S corporation	34.3	39.7	32.6	37.9	33.9	34.8
Capital	15.8	25.5	16.8	25.5	21.3	25.6
Other	31.5	38.6	31.2	38.0	34.0	35.9
Average	27.3	35.1	31.6	38.3	36.0	37.9
<i>Panel C: Elasticities</i>						
Labor	1.3		0.4		0.3	
S corporation	−0.2		−0.8		−6.9	
Capital	3.8		2.6		1.6	
Other	4.1		2.6		2.1	
Average	2.6		0.9		0.5	

Notes: Labor income includes wages, salaries, Schedule C self-employment income, farm income, and 90 percent of active partnership income. S corporation income includes active S corporation net income and 10 percent of active partnership net income. Capital income includes capital gains and dividends. Other income includes taxable interest, retirement income, passive passthrough income, and remaining sources. Total income is AGI plus adjustments indexed to 2014 with the CPI-U-RS. Total incomes between 2011 and 2014 are used to set relative income thresholds. Fractions of net passthrough income from active S corporations or partnerships are from a 2011–2013 overlapping panel of SOI data. Marginal tax rates come from the JCT Individual Tax Model. Average marginal tax rates are weighted by two-year sources. Sources: IRS administrative data; IRS SOI; JCT Individual Tax Model; authors' calculations

1.8 for the top 0.1 percent and 0.5 for the rest of the top 1 percent. As expected, one of the largest source-specific elasticities is for capital income, mostly due to a large fall in realized capital gains following a one-year surge. Although active S corporation income tax rates increased, these rates increased less than those on other income sources. This likely contributed to negative elasticities.

### C. Longer-Term Income Responses

As of this writing, it is still early to draw conclusions about longer-term responses. However, Table 4 shows changes in real income other than capital gains between 2011 and 2014 to remove the effects of temporary shifting.

The exclusion of active S corporation income from the new 3.8 percent NIIT appears to have resulted in some taxpayers re-characterizing S corporation income as active rather than passive. For the top 0.1 percent, the increase in active S corporation income made up half of the total increase in income (51 percent). About a third of this increase in active S corporation income seems to be due to a shift from passive to active income.<sup>35</sup> This shift partially explains the decrease in “other” income, which includes passive S corporation income. Active S corporation income could be purposefully increased in a number of other ways, such as a decrease in the fraction of profits paid as wages.

**Table 4**  
Shifting into Active S Corporation Income, 2011–2014

	Top 0.1 Percent		P99–99.9		P98–99	
	2011	2014	2011	2014	2011	2014
<i>Panel A: Income (\$Billions)</i>						
Labor	315	334	645	678	384	391
S corporation	113	129	79	104	19	27
Other	138	135	105	96	58	69
Total	567	598	830	878	461	487
<i>Panel B: Change in Income (\$Billions)</i>						
Labor		19		33		7
S corporation		16		25		8
Other		–3		–9		11
Total		32		48		26
<i>Panel C: Change in Income Type as a Percent of Change in Total Income (%)</i>						
S corporation		51		51		32

Notes: Total income excludes capital gains. Average incomes (AGI plus adjustments less capital gains in AGI) between 2011 and 2014 are used to set relative income thresholds. See Table 3 for other definitions.  
Sources: IRS administrative data; IRS SOI; authors' calculations

<sup>35</sup> In a 2011–2013 overlapping panel of IRS SOI individual tax returns and thresholds set by three-year average incomes excluding capital gains, top 0.1 percent active S corporation net income increased \$21 billion and passive S corporation net income decreased \$6 billion. For the rest of the top 1 percent (P99–99.9), active S corporation net income increased \$18 billion and passive S corporation net income decreased \$5 billion.

To verify that some high-income taxpayers re-characterized S corporation income from passive to active in 2013, thereby avoiding the new NIIT, we use the 2011–2014 SOI overlap panel. Among taxpayers with average net S corporation income of at least \$500,000 over this period and at least 90 percent of net S corporation income reported as *passive* income in both 2011 and 2012, about a third reported at least 90 percent was *active* income in both 2013 and 2014. Moreover, over half of this subgroup had 2013 active S corporation income within 25 percent of their 2012 passive income. This suggests taxpayers re-characterized the same income sources from passive to active, perhaps using the “fresh start” option, altering their participation activities, or making other organizational changes so as to justify the change. Note that some taxpayers may have previously been eligible to label their income as active, but the NIIT created an incentive to characterize it as active starting in 2013.

As shown by the responses to OBRA93, executives are likely to react when tax rates change, especially those with more control over their compensation. Cross-section SOI tax data between 2011 and 2014 show that primary tax filers who identify as executives or board members on their tax return received a relatively constant share of total income within each top income group (about a quarter of top 1 percent income). However, the share of dividends earned by executives in the top 1 percent decreased by about a fifth between 2011 and 2014 from 32 to 27 percent. The decrease is even larger for the next percentile (P98–99), perhaps because these executives work for smaller firms over which they have more control. Even though dividends are still taxed at preferential individual rates, the 2013 tax rate increases could have contributed to this decline.

#### **D. Capital Gains Responses**

The 2013 increase in the top capital gains rate was large: roughly 10 percentage points from 15 to 25 percent. In 2012, realized long-term gains increased by 62 percent from \$376 billion to \$610 billion, and then decreased to \$462 billion in 2013 (Office of Tax Analysis, 2016b). Taxes on long-term gains increased from \$50.5 billion to \$82.7 billion between 2011 and 2012 and then to \$85.7 billion in 2013 under the new higher rates.

The SOI Sales of Capital Assets Study provides additional insight into the end of year activity in 2012. As shown in Table 5, \$87 billion of net long-term gains, or 31.6 percent of all gains for which the month of realization was determined, were realized in December 2012. For corporate stock, 29.4 percent of gains were realized in December 2012, as compared to only 6.7 percent in December 2011. While this suggests a substantial shifting response, it appears moderate compared to 1986 when realizations doubled (Figure 2). The smaller reaction may be due to the delayed enactment of ATRA, which gave taxpayers no time to plan with certainty, the limited number of affected taxpayers, and also the “false alarm” realizations that took place in December 2010 when the prior extension of the low rates was passed.

**Table 5**  
**Long-Term Capital Gains Realized by Month of Sale, 2011–2012**

Month of Sale	Net Long-Term Gain (\$Billions)				Percent of Annual Net Long-Term Gain			
	2011		2012		2011		2012	
	Total	Stocks	Total	Stocks	Total	Stocks	Total	Stocks
January	12.1	7.4	16.2	9.7	8.4	10.7	5.9	6.8
February	9.6	6.6	13.0	7.1	6.7	9.6	4.7	5.0
March	12.7	7.2	15.9	8.2	8.9	10.4	5.8	5.8
April	13.7	8.3	17.0	9.5	9.5	12.0	6.2	6.6
May	12.2	5.9	13.8	6.3	8.5	8.6	5.0	4.4
June	12.0	5.4	21.7	13.4	8.4	7.8	7.9	9.4
July	15.2	7.0	15.5	7.5	10.6	10.2	5.6	5.3
August	9.9	4.6	15.4	8.0	6.9	6.6	5.6	5.6
September	8.3	2.5	17.8	9.8	5.8	3.7	6.5	6.9
October	9.4	5.0	19.4	10.0	6.6	7.3	7.1	7.0
November	6.4	4.5	22.2	11.1	4.5	6.5	8.1	7.8
December	22.0	4.6	87.0	41.8	15.3	6.7	31.6	29.4
Total determined	143.5	69.0	274.8	142.3	100.0	100.0	100.0	100.0

Notes: The data include only those transactions for which the holding period could be determined. Taxpayers only have information on net gains or loss for pass-through gains from partnerships, S corporations and fiduciaries, and capital gains distributions from mutual funds. In addition, the date of sale may not be accurately reported by the taxpayer. Long-term gains with non-determinable holding periods were \$232.4 billion for 2011 and 340.1 billion for 2012. Sources: Wilson and Liddell (2016) and authors' calculations

## VI. CONCLUSIONS AND IMPLICATIONS

This paper examines how high-income taxpayers responded when affected by major tax law changes. What general conclusions and policy lessons can we draw?

First, we find that high-income taxpayers consistently respond to changes in tax rates in order to limit their tax liabilities. This is not a new finding but is important for policymakers to remember.

Second, taxpayers respond differently to tax increases and tax decreases. When tax rate increases could be anticipated, such as in 1986, 1992, and 2012, some taxpayers accelerated the receipt of income ahead of the effective date. When tax rates decreased, taxpayers seemed to react with less immediacy (Figure 2), perhaps because they received the benefits automatically and lower tax rates reduced the returns from tax planning. Larger responses are seen among the highest income taxpayers, as they have more ability to time income to avoid tax increases and take advantage of tax decreases.

Besides changing the timing of income, taxpayers reduced the impact of higher rates by changing how their businesses were organized, increasing deferrals of earned income, and re-allocating portfolios into tax-preferred investments and income types. For example, following TRA86 many new businesses were organized as pass-through entities rather than C corporations subject to two layers of tax. Following increased ordinary rates with OBRA93, demand increased for investments that generated capital gains or other tax-preferred income. As a result, partnership assets and income grew rapidly in the early 1990s, especially for financial partnerships. Following the introduction of the 2013 NIIT and Additional Medicare tax, there is already evidence of avoidance behavior with shifts into active S corporation income and apparent re-characterization of passive to active income.

The effects of tax reforms on investment, labor supply, and other real economic activity are difficult to disentangle from macroeconomic changes. Instead, this paper focused on clearly observed responses by high-income taxpayers to major tax reforms, such as changes in timing or re-characterization of income and moves toward tax-preferred organizational forms and investments.

The findings of this paper offer a caution to policymakers as they consider future tax reforms, such as business tax reform or reductions in the corporate tax rate. Reforms should be designed to enhance tax policy goals, such as economic efficiency, and not unnecessarily create new incentives and opportunities for tax avoidance.

## ACKNOWLEDGMENTS AND DISCLAIMERS

The views expressed in this paper are those of the authors and do not necessarily reflect the views or policies of the U.S. Department of the Treasury. This paper embodies work undertaken for the staff of the Joint Committee on Taxation, but as members of both parties and both houses of Congress comprise the Joint Committee on Taxation, this work should not be construed to represent the position of any member of the Committee. The authors wish to thank Nathan Born, Austin Frerick, and Joseph

Sullivan for research assistance and Portia DeFilippes and Statistics of Income staff for invaluable help with the data. The authors also benefitted from conversations with Eugene Steuerle and attorneys in the Office of Tax Policy and the IRS and comments from Aparna Mather and Edith Brashares.

## DISCLOSURES

The authors have no financial arrangements that might give rise to conflicts of interest with respect to the research reported in this paper.

## REFERENCES

- Auerbach, Alan J., and Joel Slemrod, 1997. "The Economic Effects of the Tax Reform Act of 1986." *Journal of Economic Literature* 35 (2), 589–632.
- Auten, Gerald, and Robert Carroll, 1999. "The Effect of Income Taxes on Household Income." *Review of Economics and Statistics* 81 (4), 681–693.
- Auten, Gerald, Robert Carroll, and Geoffrey Gee, 2008. "The 2001 and 2003 Tax Rate Reductions: An Overview and Estimate of the Taxable Income Response." *National Tax Journal* 61 (3), 345–364.
- Auten, Gerald, Charles Clotfelter, and Richard Schmalbeck, 2000. "Taxes and Philanthropy Among the Wealthy." In Slemrod, Joel (ed.), *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, 392–424. Russell Sage Foundation, New York, NY, and Harvard University Press, Cambridge, MA.
- Auten, Gerald, and Laura Kawano, 2011a. "Another Look at Taxpayer Responses to the 1993 Act." In *Proceedings of the 104th Annual Conference on Taxation*, 13–20. National Tax Association, Washington, DC.
- Auten, Gerald, and Laura Kawano, 2011b. "When Tax Rates Go Up: Taxpayer Responses to the 1993 Act." Paper presented at Rethinking the Role of the State: Responses to Recent Challenges, the 67th Annual Congress of the International Institute of Public Finance, August 11, Ann Arbor, MI.
- Auten, Gerald, and David Splinter, 2016. "Using Tax Data to Measure Income Inequality: Effects of Base Broadening Tax Reform." Paper for presentation at the 109th Annual Conference on Taxation, November 18, sponsored by the National Tax Association, Washington, DC.
- Burman, Leonard E., Thomas S. Neubig, and D. Gordon Wilson, 1987. "The Use and Abuse of Rental Project Models." In C. Eugene Steuerle and Thomas S. Neubig (eds.) *Compendium of Tax Research*, 298–308. Washington, DC: U.S. Government Printing Office.
- Carroll, Robert, 1998. "Do Taxpayers Really Respond to Changes in Tax Rates? Evidence from the 1993 Tax Act." OTA Working Paper No. 79. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Congressional Budget Office, 2005. "Taxing Capital Income: Effective Rates and Approaches to Reform." CBO Paper. Congressional Budget Office, Washington, DC.

Eissa, Nada, 1995. "Taxation and Labor Supply of Married Women: The Tax Reform Act of 1986 as a Natural Experiment." NBER Working Paper No. 5023. National Bureau of Economic Research, Cambridge, MA.

Feenberg, Daniel, and James Poterba, 1993. "Income Inequality and the Incomes of Very High-Income Taxpayers: Evidence from Tax Returns." In Poterba, James (ed.), *Tax Policy and the Economy* 7, 145–177. National Bureau of Economic Research, Cambridge, MA, and MIT Press, Cambridge, MA.

Feldstein, Martin, 1978. "The Taxation of Capital Gains." Testimony, August 23. U.S. Senate, Committee on Finance, Washington, DC.

Feldstein, Martin, 1995. "The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act." *Journal of Political Economy* 103 (3), 551–572.

Feldstein, Martin, and Daniel Feenberg, 1996. "The Effect of Increased Tax Rates on Taxable Income and Economic Efficiency: A Preliminary Analysis of the 1993 Tax Rate Increases." In Poterba, James (ed.), *Tax Policy and the Economy, Volume 10*, 89–117. National Bureau of Economic Research, Cambridge, MA, and MIT Press, Cambridge, MA.

Feldstein, Martin, Joel Slemrod, and Shlomo Yitzhaki, 1980. "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains." *Quarterly Journal of Economics* 94 (4), 777–791.

Fenn, George, Nellie Liang, and Stephen Prowse, 1995. "The Economics of the Private Equity Market." Staff Studies No. 168. Board of Governors of the Federal Reserve System, Washington, DC.

Giertz, Seth, 2007. "The Elasticity of Taxable Income over the 1980s and 1990s." *National Tax Journal* 60 (4), 743–768.

Giertz, Seth, 2010. "The Elasticity of Taxable Income during the 1990s: New Estimates and Sensitivity Analyses." *Southern Economic Journal* 77 (2), 406–433.

Goosbee, Austan, 2000. "What Happens When You Tax the Rich? Evidence from Executive Compensation." *Journal of Political Economy* 108 (2), 352–378.

Gordon, Roger, and Joel Slemrod, 2000. "Are 'Real' Responses to Taxes Simply Income Shifting Between Corporate and Personal Tax Bases?" In Slemrod, Joel (ed.) *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, 240–288. Russell Sage Foundation, New York, N.Y. and Harvard University Press, Cambridge, MA.

Gorry, Aspen, Kevin Hassett, R. Glenn Hubbard, and Aparna Mathur, forthcoming. "The Response of Deferred Executive Compensation to Changes in Tax Rates." *Journal of Public Economics*.

Joint Committee on Internal Revenue Taxation, 1970. *General Explanation of the Tax Reform Act of 1969*. JCS-16-70. U.S. Government Printing Office, Washington, DC.

Joint Committee on Taxation, 2015. *Estimating Changes in the Federal Individual Income Tax: Description of the Individual Tax Model*. JCX-75-15. Joint Committee on Taxation, Washington, DC.

Kayle, Bruce, 1992. "The Taxpayer's Intentional Attempt to Accelerate Taxable Income." *Tax Lawyer* 46 (1), 89–124.

Kosnitzky, Michael, and Michael Grisolia, 2013. "Net Investment Income Tax Regulations Affecting S Corporations." *Taxes-The Tax Magazine* 91 (4), 63–74.

Kumar, Anil, 2008. "Labor Supply, Deadweight Loss and Tax Reform Act of 1986: A Nonparametric Evaluation Using Panel Data." *Journal of Public Economics* 92 (1–2), 236–253.

Lindsey, Lawrence B., 1981. "Is the Maximum Tax on Earned Income Effective?" *National Tax Journal* 34 (2), 249–255.

Moffitt, Robert, and Mark Wilhelm, 2000. "Labor Supply Decisions of the Affluent." In Slemrod, Joel (ed.), *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, 193–234. Russell Sage Foundation, New York, NY, and Harvard University Press, Cambridge, MA.

Nelson, Susan, 2016. "Paying Themselves: S Corporation Owners and Trends in S Corporation Income, 1980–2013." Working Paper. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Neubig, Thomas, and David Joulfaian, 1988. "The Tax Expenditure Budget Before and After the Tax Reform Act of 1986." OTA Paper No. 60. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Nunns, James R., Deena Ackerman, James Cilke, Julie-Anne Cronin, Janet Holtzblatt, Gillian Hunter, Emily Lin, and Janet McCubbin, 2008. "Treasury's Panel Model for Tax Analysis." OTA Technical Working Paper No. 3. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Office of Tax Analysis, 2016a. *Gaps between the Net Investment Income Tax Base and the Employment Tax Base*. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Office of Tax Analysis, 2016b. *Taxes Paid on Long-Term Capital Gains, 1977–2013*. Office of Tax Analysis, U.S. Department of the Treasury, Washington, DC.

Okner, Benjamin A., 1975. "Individual Taxes and the Distribution of Income." In James D. Smith (ed.), *The Personal Distribution of Income and Wealth*, 45–74. New York: National Bureau of Economic Research.

Pérez Cavazos, Gerardo, and Andrey M. Silva, 2015. "Tax-Minded Executives and Corporate Tax Strategies: Evidence from the 2013 Tax Hikes." Harvard Business School Working Paper 16-034. Harvard Business School, Boston, MA.

- Plesko, George A., 1994. "Corporate Taxation and the Financial Characteristics of Firms." *Public Finance Quarterly* 22 (3), 311–334.
- Reagan, Ronald, 1984. "Address before a Joint Session of the Congress Reporting on the State of the Union, January 25, 1984."
- Rose, Nancy L., and Catherine Wolfram, 2002. "Regulating Executive Pay: Using the Tax Code to Influence Chief Executive Officer Compensation." *Journal of Labor Economics* 20 (2), S138–S175.
- Saez, Emmanuel, 2015. "Behavioral Responses to Taxation: Preliminary Evidence from the 2013 Tax Increase." Presentation at the 108th Annual Conference on Taxation, National Tax Association November 20, Boston, MA.
- Sammartino, Frank, and David Weiner, 1997. "Recent Evidence on Taxpayers' Response to the Rate Increases in the 1990's." *National Tax Journal* 50 (3), 683–705.
- Samwick, Andrew, 1996. "Tax Shelters and Passive Losses After the Tax Reform Act of 1986." In Feldstein, Martin, and James Poterba (eds.), *Empirical Foundations of Household Taxation*, 193–233. University of Chicago Press, Chicago, IL.
- Showalter, Mark, and Norman K. Thurston, 1997. "Taxes and Labor Supply for High-Income Physicians." *Journal of Public Economics* 66 (1), 73–97.
- Sicular, David R., 2014. "Subchapter S at 55 — Has Time Passed This Passthrough By? Maybe Not." *Tax Lawyer* 68 (1), 185–238.
- Slemrod, Joel, 1994. "On the High-Income Laffer Curve." In Slemrod, Joel (ed.), *Tax Progressivity and Income Equality*, 177–210. Cambridge University Press, Cambridge, UK.
- Slemrod, Joel, 2000. *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*. Russell Sage Foundation, New York, NY, and Harvard University Press, Cambridge, MA.
- Steuerle, C. Eugene, 1985. "Wealth, Realized Income, and the Measure of Well-Being." In David, Martin, and Timothy Smeeding (eds.), *Horizontal Equity, Uncertainty, and Economic Well-Being*, 91–124. University of Chicago Press, Chicago, IL.
- Steuerle, C. Eugene, 2004. *Contemporary U.S. Tax Policy*. Urban Institute Press, Washington, DC.
- Wilson, Janette, and Pearson Liddell, 2016. "Sales of Capital Assets Data Reported on Individual Tax Returns, 2007–2012." *Statistics of Income Bulletin* 35 (3), 63–155.