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## On the High-Income Laffer Curve

by

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LEADING IN THOUGHT AND ACTION

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**Joel Slemrod**

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## **ON THE HIGH-INCOME LAFFER CURVE**

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## ON THE HIGH-INCOME LAFFER CURVE

Joel Slemrod

### 1. INTRODUCTION

Should the rich pay more tax? Many in the Democratic party think so, judging by the Democratic-sponsored Congressional proposal of 1992 that featured an increase in the top bracket rate from 31% to 36%, with a 10% surtax on millionaires taking the proposed top rate to 39.6%. So apparently do many in the British Labour Party, whose 1992 electoral platform contained an increase in the top marginal income tax rate from 40% to 50%. As it happened, the U.S. tax bill containing the tax increase was vetoed by President Bush, largely because of the rate increases; the Labour Party was defeated.

Despite the recent lack of success in the U.S. and U.K. of proposals to tax the rich more heavily, it is unlikely to go away as an issue. A tax increase on those with income exceeding \$200,000, plus a "millionaire's surtax," is part of the Democratic party's platform for the 1992 presidential race. Fueling the drive to increase tax progressivity is a sense that the 1980's saw a shift in tax burden away from the high-income class toward the middle-income class, at the same time the distribution of pre-tax income became substantially more unequal.<sup>1</sup>

Logically prior to the question of whether the rich should be taxed more is the question of whether the rich can be taxed more. If levying higher rates on the rich yields no increase in revenue, then only the envious would favor such taxation, for it benefits no one in society. Even if higher rates yield revenue--but cause significant behavioral response--then the economic costs of raising the revenue could be quite high, and be more likely to exceed the benefits of the revenue gained.

The notion that an increase in tax rates might reduce tax revenue played a major role in the tax policy debates of the late 1970s and early 1980s, and is most associated with the name of Arthur Laffer. The "Laffer curve," the inverted-U-shaped plot of revenues against tax rate, encapsulated the idea that, because of the response of taxpayers, there was leakage in revenues when tax rates increased and that tax increases beyond some tax rate caused revenues to fall.

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<sup>1</sup>For one assessment of these phenomena, see Gramlich, Kasten, and Sammartino (1992).

Most economists believe that the economic response to the tax cuts of the 1980s has discredited the idea of an inverse revenue response to tax rates as it applies to an across-the-board cut. Framed as a proposition solely about the highest income classes, however, the Laffer curve is still alive, championed in the work of Lawrence Lindsey (1990), among others. It was Lindsey who first pointed out that the 1981 cut in the top marginal tax rate from 70% to 50% coincided with an unprecedented increase in the income earned by the top 1% of the income distribution. The rapid increase in income inequality and, in particular, the rising share of income received by the top 1% has since become a widely studied phenomenon, and has been ascribed to increased openness of the economy, technological changes, and an increased return to education due perhaps to changes in the relative supply of skilled and unskilled labor.<sup>2</sup>

The high-income Laffer curve offers a competing, though not necessarily mutually exclusive, explanation for the recent growth in measured inequality. The story goes as follows: under the pre-1981 tax system, when the top tax rate was 70% (and even higher before 1964), there was a tremendous incentive for high-income individuals to rearrange their financial affairs and form of compensation to expose less income than otherwise to taxation; there was also less incentive to expend effort to earn money. Many of these tax responses to high taxation would reduce income as measured by the Census, other surveys such as the Panel Study on Income Dynamics, or tax return data. For example, the imputed income from owner-occupied housing, which is untaxed at the federal level, does not ordinarily enter into measures of income, nor does deferred compensation. To the extent that high taxes before 1981 caused behavior that reduced the measured income of the high-income individuals, the recent rapid increase in inequality at the top is an illusion. High-income individuals had more income before 1981 than was measured, because much of it came in the form of such things as imputed income, fringe benefits, and leisure.

The answers to both questions--the economic cost of taxing high-income individuals and the origin of the apparent recent surge in income inequality--depend on the extent of behavioral response to taxation. In other words, we need to know where we are on the high-income Laffer

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<sup>2</sup>See Levy and Murnane (1992) for a useful survey of the non-tax explanations for the growth of inequality in the past two decades.

curve. This paper reviews some evidence that may be helpful in evaluating this question, and therefore also in understanding the role of taxes in the observed increase in income concentration.

## 2. WHO ARE THE RICH<sup>3</sup>?

F. Scott Fitzgerald: "The rich are different from us."

Ernest Hemingway: "Yes, they have more money."

### 2.1 Demographic Information

Mr. Hemingway was not quite right, as the demographic information of Table 2.1 shows. Compared to the overall population, high-income families were (as of 1982) much more likely to be headed by someone between 45 and 74 years old, and to be highly educated. Also true, but not shown in the table, is that high-income families are much more likely to have a household with a working husband and a nonworking wife, and are almost all non-Hispanic Caucasians. Similar demographic patterns are present in the 1962 data that is available, although Wolff (1992) notes that between 1962 and 1983 the share of total wealth accounted for by households headed by someone between 45 and 69 jumped from 60 to 66 percent.

Table 2.1 also shows just how different is the occupational breakdown of the rich. While 38% of the total population report their occupation as clerical/sales, craftsman/foreman, or operative/labor/service work, less than 2% of the high-income group do so. For the high-income group there is a preponderance of household heads who are lawyers or accountants (12%), health service professionals (5%), and in banking, insurance, or real estate (24%). For the overall population, these three occupation categories together account for only 4% of the total. More than one-quarter of all heads of high-income families report their occupation as self-employed professional or managerial, compared to only 10% for the overall population.

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<sup>3</sup>I will use the term "rich" interchangeably with "affluent" and "high-income." The operational definition I employ is those households whose income is in the top 1% of all household, or taxpaying, units.

## 2.2 Composition of Income

Capital income is a much more important source of income for the affluent, compared to the population as a whole; wages and salaries are correspondingly less important. As Table 2.2 suggests, (as of 1988) wage and salary income comprises only 43% of gross income<sup>4</sup> for the rich, but represents 82% of gross income for everyone else. Realized capital gains comprise 22.1% of gross income of the affluent, compared to 1.8% for everyone else. Income from rents, royalties, estates and trusts, and partnerships (Schedule E income) is 13% of total income for the rich, compared to 2% for everyone else. The share of reported business profit is, however, not much different for the two groups.

It is important to note that, for the affluent, the averages mentioned above do not describe a "typical" household. On the contrary, Figure 2.1 shows that the distribution of the ratio of wages and salaries to gross income is U-shaped, with 17.7% of the rich having no wage income at all and 31.5% having wages and salaries comprise at least 90% of gross income. The overall average wages-to-income percentage of 43% cited earlier is particularly misleading because the fraction of taxpayers whose wages are between 40% and 50% of gross income is the next-to-the-lowest of all subsets of the top 1% group. In contrast, the bottom panel of Figure 2.1 shows that, for taxpayers as a whole, 67.7% earn at least 90% of their gross income from wages and salaries; note also that the overall distribution is U-shaped, although a much smaller fraction (15.2% compared to 40.5% for the rich) have positive wage income amounting to less than 90% of gross income.

For the other major income sources there is a fairly consistent story for the top 1%. Most have some non-zero amount, most receive a small fraction from any particular source, and some have their income dominated by that source. These patterns are displayed in Figure 2.2.

## 2.3 The Important Patterns

The data tell us that the affluent are a diverse group, distributed across all age groups (although concentrated among the 45-74 age classes), occupational groups (although concentrated

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<sup>4</sup>Gross income is here and later defined as adjusted gross income plus the part of long-term capital gains that is excluded from income for tax purposes. This exclusion did not apply in 1988, so that gross income is identical to adjusted gross income for tax purposes, but does matter in the definition for the earlier years discussed in Section 4.



among professionals and business) and educational classes (although more educated than average). The picture suggested by an "average" high-income American is particularly misleading with respect to the composition of income, because the income of many of the affluent is dominated by one or two income sources. Although on average 43% of their income is from wage and salaries, having about half of income in wages and salaries is actually a very untypical situation. Nevertheless, the importance of nonwage income is clear. Figure 2.1 reveals that 46.1% of the affluent receive at least half of their income from sources other than wages and salaries. Thus in the analyses that follow we must confront the impact of taxation on nonlabor income.

#### **2.4 Dimensions of Response to High Tax Rates**

Households can react to high marginal tax rates in a variety of ways. One response is to reduce the amount of time and effort devoted to income-earning activities, via seeking less overtime work, taking more vacation, or choosing lower-paying, less burdensome jobs over higher-paying, more burdensome jobs. This kind of behavior would result in lower-than-otherwise wage and salary income as well as less income from self-employment.

Taxes could also affect the form in which compensation to labor effort is paid. Higher tax rates provide an incentive to receive payment in the form of untaxed fringe benefits, to defer compensation to retirement both to postpone the tax liability and to incur the tax liability in presumably lower-earning, and therefore lower-tax-rate, years, and to receive preferentially taxed stock options rather than salary. For the self-employed, taxes can affect whether firms are incorporated.

Taxes can also affect financial behavior, one aspect of which is portfolio composition. Higher marginal tax rates will induce individuals to favor tax-preferred assets such as owner-occupied housing, tax-exempt bonds and low-dividend "growth" stocks over fully-taxed assets such as taxable bonds and high-dividend stocks. Borrowing (with deductible interest payments) to finance tax-preferred investments becomes especially attractive to people with high tax rates.

A fourth category of response is capital gain realization behavior. Because capital gains are taxed upon realization rather than accrual, and because accrued capital gains are excused from taxation upon the bequest of the assets, the decision of when to dispose of assets, and thus trigger

taxation, is potentially quite sensitive to taxation. This is an important issue for the affluent, because capital gains comprise a significant fraction of their income.

These four dimensions of response to high tax rates, and others not detailed here, apply to both affluent and nonaffluent households.<sup>5</sup> There is, however, reason to suspect that affluent households have more flexibility in arranging their hours of work and form of compensation. Furthermore, because capital income is so important a fraction of income, portfolio and capital gains realization responses matter in a way they do not for the rest of the population. For this reason it may not be appropriate to assess the high-income Laffer curve using estimates of behavioral response based on evidence and analyses concerning the population as a whole.

Two analytical points are worth making at this point. The first is that a change in the marginal tax rate applying only to the top bracket of income (or more generally, to income above a cutoff) is more likely to provoke an inverse revenue response than an across-the-board cut, for a given (uncompensated) elasticity of response. For example, consider a tax system that has two brackets, such that tax liability equals  $m_1 Y$  if income is less than  $\bar{Y}$  and equals  $m_1 \bar{Y} + m_2(Y - \bar{Y})$  if  $Y$  exceeds  $\bar{Y}$ , where  $m_1$  and  $m_2$  are the marginal tax rates applicable to each bracket. Now consider an increase in  $m_2$  only, holding  $m_1$  constant. In this case revenue will decline if the (absolute value of the) marginal tax rate elasticity of income, assumed to be constant for all taxpayers, exceeds  $(Y^a - \bar{Y})/Y^a$ , where  $Y^a$  is the average income level for taxpayers with income over  $\bar{Y}$ .<sup>6</sup> Of course this trigger elasticity for an inverse revenue response is less than one, whereas in the simple linear tax case (where  $\bar{Y}$  is zero), the trigger elasticity is exactly one. The trigger

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<sup>5</sup>These four categories do not exhaust the ways that individuals can respond to changes in tax rates. One other dimension of response, not treated here for lack of data, is tax evasion. Empirical evidence on the responsiveness of evasion to elements of the tax system is presented in Slemrod (1992b).

<sup>6</sup>This calculation ignores the fact that it would never be optimal, in response to an increase in  $m_2$ , to reduce  $Y$  below  $\bar{Y}$ .

elasticity is lower because the increase in  $m_2$  does not increase the tax raised on the inframarginal income between zero and  $\bar{Y}$ .<sup>7</sup>

The second point is that, for given income and substitution effects, a tax change that applies only to the top tax bracket will produce a more negative uncompensated supply elasticity than would an across-the-board charge. This occurs because, compared to an across-the-board tax increase, the decline in income is lower, so that there will be less of a positive income effect on labor supply to offset the negative substitution effect.

### 3. TAX CHANGES BETWEEN 1962 AND 1988

The best way to judge how high-income people react to high tax rates is to observe how they actually have reacted in the past. For this purpose the ideal data set would follow the same set of individuals through periods of tax rate regime changes. Unfortunately, there is no panel data set covering a long time span which has income and wealth information for a large sample of high-income households. One alternative is to compare the behavior of a non-repeating sample of individuals under different tax regimes. Fortunately for this kind of exercise, starting in 1988 and peering backwards over the past three decades, one observes a non-decreasing series of statutory rates on the highest levels of income. In 1988 and 1987 the top rate was 28% and 38.5%, respectively; in the 1981-86 period, it was 50%; in the 1965-1980 period, it was (except for 1968 through 1970) 70%; between 1951 and 1963, the top rate hovered at slightly over 90%.

In Section 4, I begin to analyze data on high-income taxpayers from several years between 1962 and 1988, with a goal of identifying tax-induced changes in behavior that would dampen the revenue otherwise expected from imposing higher rates on high-income individuals. Of course ascribing differences in behavior across these periods to differences in the tax regimes is a tricky business. Much else changed between 1962 and 1988, including the households for whom data are collected. Nevertheless the hope is that some insightful patterns will emerge. Before

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<sup>7</sup>To get a feel for the empirical importance of this point, consider a policy that would impose an increase in the marginal tax rate applying only to the top 1% of income earners. In 1988 the cutoff level for the top 1% of AGI earners was \$156,600, and the mean AGI of taxpayers above this level was \$432,110. Thus a tax increase targeted at this group would raise revenue as long as the elasticity of taxable income was less than 0.64.

undertaking this exercise, in this section I briefly review the important changes in taxation between 1962 and 1988.

### **3.1 Tax Rates on the Affluent, 1962-1988**

Table 3.1 presents the tax rate schedules for a married couple filing jointly for 1962, 1977, 1982, and 1988; all the income brackets are expressed in 1988 dollars. Note first that the notoriously high top marginal taxes of 1962 applied only to very high real income levels. For example, the top marginal tax rate of 91% applied only to incomes above about \$1.5 million in 1988 dollars. At the real income level where in 1977 the 70% rate began, in 1962 the marginal tax rate of 78% was higher, but not that much higher, than in 1977. A marginal tax rate as high as 50% began at approximately the same level of real income in 1962 and 1977.

Thus between 1962 and 1977 the marginal tax rate that applied to the top 0.1% of families fell significantly; this decline did not, however, occur for the lower nine-tenths of the top 1% of taxpayers.<sup>8</sup> However, between 1977 and 1982 there was a significant drop in the marginal tax rate applying to the top 1%; another large reduction occurred between 1982 and 1988.

Information concerning the marginal tax rate on taxable income does not, however, complete the picture of how taxes impacted high-income individuals. Throughout this period there was special tax treatment of particular forms of income. Changes in some of the most important of these features are discussed next.

#### **3.1.2 Capital Gains Tax Rates**

Capital gains have always had special tax treatment; the basic rate on realized long-term gains has never exceeded 35%, although special provisions, some discussed below, pushed it higher than that in certain cases. The special tax treatment has several elements. First of all, gains are taxed only upon realization; furthermore, inheritors of capital assets can adjust the taxable basis to the current market price, thus exempting from tax all the gain accrued during the lifetime of the bequeathor. Realized gains are taxed on a nominal basis, with no adjustment for changes in the

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<sup>8</sup>In 1988 the cutoff for the top 1% of adjusted gross income was \$156,600; the cutoff for the top 0.1% was \$684,900.

price level during the holding period. There is a limit on the amount of losses that can be taken against other income; losses in excess of that limit can, though, be carried forward without interest to future years.

Since the Revenue Act of 1921, capital gains have been taxed preferentially. Recently, long-term gains (defined as gains on assets held for at least six months or, between 1978 and 1984, one year) were given a 50% exclusion from taxable income. This exclusion was increased to 60% after October 31, 1978 and eliminated by the Tax Reform Act of 1986.

Several other provisions substantially affected the tax rate on realized capital gains. One such provision was the alternative tax on capital gains. Prior to 1970, it allowed taxpayers the option of paying an effective tax rate of 25% on all long-term capital gains. The Tax Reform Act of 1969 limited the alternative 25% rate to a maximum of \$50,000 in net long-term gains per year.

Table 3.2 presents one estimate of the average marginal tax rate on long-term capital gains for high-income individuals, including all the provisions discussed above and the "poisoning" of the maximum tax on earned income, discussed below. It shows rates generally rising from 1965 to 1978, falling abruptly in 1979 and still further in 1982, and staying at the low point for the period until 1987, when rates moved up to a level reminiscent of the late 1960s and late 1970s.

### 3.1.3 The Maximum Tax on Earned Income

The maximum tax on personal service income, passed as part of the Tax Reform Act of 1969, was designed to limit the marginal tax rate on noncapital income to be no more than 50%, even though the statutory marginal tax rate reached 70%.<sup>9</sup> It allowed a qualifying taxpayer to subtract from the ordinary tax liability the difference between the ordinary tax liability on "earned taxable income" and what that liability would have been if the top tax rate were 50%.

For two reasons this provision did not literally impose a maximum marginal tax rate of 50% on earned income. In fact the effective marginal tax rate on earned income was  $0.50 + (t_o - \alpha t_E)$ , where  $t_o$  is the marginal tax rate on all income,  $t_E$  is the (hypothetical) marginal tax rate if there were no unearned income, and  $\alpha$  is the fraction of earned income treated as earned

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<sup>9</sup>This provision was phased in beginning in tax year 1971 and was fully effective starting in 1972.

taxable income (where the difference is the amount of deductions that had to be apportioned to earned income).<sup>10</sup>

Although the maximum tax did not literally impose a ceiling marginal tax rate of 50% on earned income, it did significantly reduce the marginal tax rate on earned income for high-income taxpayers. Because the maximum tax provision did not literally impose a top rate of 50%, the 1981 tax act did provide a further significant cut in the marginal tax rate on affluent taxpayers. As an illustration, Table 3.3 shows that in 1980 the average marginal tax rate on earned income was below 60%, although the top statutory rate in 1980 was 70%; there was, though, a wide dispersion of marginal tax rates within any group. Loosely speaking, the maximum tax was not helpful to taxpayers whose earned income by itself would not put them in a very high tax bracket, but whose unearned income did so. In other words, relief was granted in proportion to earned income, regardless of whether the presence of additional unearned income increased the taxpayer's marginal tax rate above 50%.<sup>11</sup>

Between 1971 and 1976 the maximum tax also had an indirect ("poisoning") effect on the marginal tax rate on capital gains, because in some cases additional capital gains reduced the amount of earned income eligible for the maximum tax preference. Moreover, there was an absolute limit on the amount of income eligible for the maximum tax equal to taxable income minus the included portion of capital gains.

### **3.1.4 Other Important Provisions**

Under the Revenue Act of 1964, taxpayers could average fluctuating income over a five-year period so as to reduce the total tax liability toward the tax that would be due if the same total income was received in a constant stream; the 1969 Act increased the amount which could be averaged. The 1986 Act eliminated averaging, partly because it is less necessary in an era when

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<sup>10</sup>This was pointed out by Sunley (1974) and Lindsey (1981). See these papers for further discussion, including a definition of the concept of earned taxable income.

<sup>11</sup>This characteristic of the maximum tax on earned income suggests the possibility of an interesting test of the labor supply responsiveness of high-income individuals, since the 1981 act affected different households differently, depending on their pre-1981 maximum tax status.

the degree of graduation in rates is much less. When in effect, the averaging provisions reduced the effective tax rate on temporarily high income below what it would otherwise be.

The 1969 Act also introduced an "add-on" minimum tax of 10 percent on a set of "preference" items, including the excluded part of long-term capital gains; the rate was increased to 15 percent by the Tax Reform Act of 1976. The Revenue Act of 1978 Act removed from the list of preference items the excluded portion of long-term capital gains; until this time this feature would, in some cases, have increased the tax on capital gains. Starting in 1979 the add-on minimum tax was supplemented by an "alternative" minimum tax, whose base included the excluded part of long-term gains and other preference items. For high-income taxpayers the rate has been between 20% and 25% since 1979. The add-on minimum tax was repealed in 1982, although the alternative minimum tax treatment of capital gains was retained. Because the 1986 Act eliminated the exclusion for long-term capital gains, it is no longer a part of the minimum tax base.

This discussion does not exhaust all the tax code changes of the past three decades which would affect the economic behavior of the affluent; potentially important are the effective tax rate on business income, which was dramatically reduced by the Economic Recovery Tax Act of 1981, and the changing ability to use tax losses to offset other income. These other trends notwithstanding, the overall trend from 1962 to the present has been a decline in the top statutory rate imposed on ordinary income accompanied by a first rising, then falling effective tax rate on capital gains.<sup>12</sup> Because of the large share of capital gains in the income of the affluent, and because of the arguably large tax sensitivity of capital gains realizations, it is important to recognize these two distinct trends.

#### **4. COMPOSITION OF WEALTH AND INCOME**

I begin the search for evidence of tax effects on behavior of the affluent by examining in Tables 4.1 through 4.8 the changes from 1962 to 1988 in the composition of gross income and wealth of the top 1% of gross income earners, compared to the population as a whole. The income data in Tables 4.1 through 4.5 are based on the public-use Individual Model Files compiled by the

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<sup>12</sup>The top rate on long-term capital gains rose again in 1987, from 20% to 28%.

Statistics of Income Division of the Internal Revenue Service, so that the population is tax filing units.<sup>13</sup> The wealth data in Tables 4.6 through 4.8 are from the 1962 Survey of Consumer Finances and the 1983 and 1989 Surveys of Financial Characteristics of Consumers, all conducted by the Board of Governors of the Federal Reserve System.

Several characteristics of these tables are worthy of note. First, there is evidence of the recent increased concentration of wealth and, especially, income. Although the share in gross income earned by the top 1% gradually fell from 9.4% in 1962 to 8.8% in 1977, it increased to 10.5% in 1982 and rose sharply to 15.4% in 1988. The share of wealth rose slightly from 21.9% in 1962 to 22.8% in 1983, and to 25.3% in 1989.

The composition of income and wealth of the top 1% also exhibits some striking trends. The first is the sharp increase in the importance of wages and salaries between 1962 and 1977, increasing from 30.5% in 1962 to 34.6% in 1970 and to 44.4% in 1977; its share remained approximately constant between 1977 and 1988. Offsetting the increased share of wages and salaries were declines between 1962 and 1977 in all major categories of capital income except interest--dividends, net capital gains, rents and royalties, partnership net profit, and business net profit. The declining share of dividends, business net profits, and also rent and royalties continued between 1977 and 1988, thus apparently reflecting a two-and-a-half decade long trend. Over the whole period the share of dividends fell from 16.2 to 5.8 percent of income; the share of business net profits fell from 13.1 to 4.8 percent.

The approximately constant share of gross income received by the top 1% between 1962 and 1977 is thus the net result of two offsetting trends. Wage and salary growth for the top 1% far exceeded the overall average--nominal growth of 351% for the top 1% compared to 244% overall. The growth of other income (everything but wages and salaries) for the top 1% fell short of the overall average--148% compared to 190%. In contrast, between 1977 and 1988 both the wage and

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<sup>13</sup> Because the tax filing population is a subset of the population as a whole, the concentration of income for tax filers may misrepresent the overall concentration; the direction of the bias is theoretically indeterminate, depending on the precise distribution. Because the real income threshold for filing a return has changed over the past three decades, so has the fraction of all households represented by the tax filing population; thus whatever bias exists cannot be assumed to be constant over time. The extent and trend of this bias is being investigated further by the author.



salary income and other income of the top 1% grew at a much faster rate than for the whole population. The combination of these factors explains the large growth between 1977 and 1988 in the share of total income going to the top 1%.

What could be behind the lagging growth of the capital income of the top 1% between 1962 and 1977? Two possibilities exist. One is that their share of wealth declined, while the relative rate of return stayed constant. Because no wealth survey exists for 1977, this possibility is impossible to evaluate directly. However, Tables 4.6 and 4.7 indicate that wealth became slightly more concentrated between 1962 and 1983. It is therefore unlikely, although not impossible, that wealth was less concentrated in 1977 compared to 1962.<sup>14</sup>

The answer thus most likely lies in the second possibility, that the relative nominal rate of return on wealth reported on tax forms by the top 1% declined between 1962 and 1977. Part of this could be due to a reshuffling of their portfolios toward assets which yield a lower taxable rate of return. This kind of reaction would be inconsistent with a pure tax story, which would imply a reallocation over time of assets with high taxable rates of return toward high-income individuals, as their marginal tax rate relative to the population as a whole declined. But of course much else had changed between 1962 and 1977, especially the rate of inflation. It stood at 1.3% in 1962, but by 1977 it was 6.7%, and it had topped 12% just three years before. The fact that the tax system taxes nominal rather than real capital income means that higher inflation intensifies the clientele effect of high-tax individuals avoiding fully-taxed assets such as bonds, even holding negative positions, and instead holding tax-preferred or tax-exempt assets. In periods of inflation, the marginal tax rate understates the true effective tax rate on real income; higher inflation can offset the clientele effect of compressing marginal tax rates.

The declining importance of dividends for the top 1% is mirrored in the data on the composition of wealth (Tables 4.6 through 4.8) by the decline in the share of wealth held in stock for this group. In 1962 stocks comprised 38% of the net worth of the top 1%, but had fallen to

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<sup>14</sup> Although note that Wolff (1992), using evidence from estate-tax series, concludes that wealth concentration fell substantially during the mid-1970s, and then increased sharply during the late 1970s and early 1980s.

22% by 1983 and only 8% by 1989.<sup>15</sup> Thus for stocks the income and wealth data are consistently reflecting a decline in the role of stock for high-income individuals.

For business assets and real estate, however, the wealth and income data do not tell a consistent story. The wealth data show that the fraction of the net worth of high-income individuals held in business assets first dropped from 33% in 1962 to 31% in 1983, and then rose sharply to 38% in 1989. Recall that over this same period the fraction of capital income that is called business income declined for this group. Trends in real estate ownership of the top 1% are also mixed. While the fraction of net worth represented by the principal residence shows no trend, the fraction of net worth held in other real estate increased sharply from 11% in 1962 to 15% in 1983 and 25% in 1989. However, the share of other real estate in total net worth of all households rose similarly over this period, so that there was no marked move toward concentration of other real estate.

One of the striking aspects of Tables 4.1 through 4.8 is the comparative evolution of business assets and income of the top 1%. According to the wealth surveys, net business and professional assets of the top 1% rose from \$85.6 billion in 1962 to \$698.2 billion in 1982, more than an eightfold nominal increase. Yet the sum of business, farm and partnership incomes reported on the tax returns of the top 1% rose from \$7.9 billion in 1962 to only \$9.8 billion in 1982, an increase of only 24%. Part of the explanation is that 1982 was a recession year, but almost certainly another important part of the explanation is that the combination of generous investment incentives (accelerated depreciation and investment tax credits) and favorable "tax shelter" provisions reduced the effective tax rate on business operations. Notably, by 1988 the partnership, business and farm income of the top 1% had rebounded to \$76.5 billion; of course by 1988 both the recession had passed and the ability to offset other income with partnership losses had been sharply curtailed.

Are the differences in portfolio composition between 1962 and the 1980s consistent with the story that lower tax rates induced high-income taxpayers to shift from tax-preferred to taxable

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<sup>15</sup>The share of stocks in net worth for the whole population was also sharply declining over this period, from 17% to 6%. But the share of stock held by the top 1% fell from 51% to 44%. Recall that the 1989 data is not strictly comparable to the earlier data.

assets? This question is difficult to answer with this impressionistic look at highly aggregated data, comparing time periods for which much more than relative tax rates have changed, including inflation rates and the supply of various assets. It is also very difficult to assess the "taxability" of assets--ranging from fully tax exempt to fully taxed on nominal income--because not only did the structure of marginal individual tax rates change, but so did the tax rules governing business and real estate income. Beyond presenting some helpful data, only a few broad conclusions are possible.

Consider first the two types of completely federal-tax-exempt assets, the principal residence and state and local bonds; they should become less attractive to the rich as their relative marginal tax rate declines. In fact, neither shows a clear downward trend over the period as a share of the net worth of the affluent. However, the fraction of all state and local bonds held by the top 1% did decline from 85% to 51% between 1962 and 1989, a reduced concentration of holdings that is exactly what the tax clientele story predicts. They comprise only 4.2% of the net worth of the rich in 1962, and only 3.0% in 1989.

Another interesting, but not decisive, calculation supports the view that the portfolio composition of the affluent has not changed in a way that has significantly increased the amount that is exposed to taxation. According to the 1962 wealth survey, the top 1% of income earners had \$279.7 billion of net worth plus debt; in that year the top 1% of taxpaying income earners had \$19.5 billion of taxable capital income (defined to include interest, dividends, partnership net profit, half of net capital gains, business or farm net profit, and rents, royalties, estate, trust, and other income). The nominal rate of taxable return was thus 7.0%. The comparable calculation for the other 99% of income earners yields a nominal rate of taxable return equal to 4.0% (45.3 divided by 1130.3). Repeating the same calculation for 1989 yields 5.4% for the top 1% and 2.6% for the other 99%.<sup>16</sup> Thus both the absolute and relative difference in rate of return remained roughly constant between these two periods.

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<sup>16</sup>This calculation is based on 1989 income data, not 1988 data as in Table 4.5. Note that the definition of taxable capital income includes all of net capital gains for 1989.

## 5. CAPITAL GAINS AND RANK REVERSALS

The data on income composition in Tables 4.1 through 4.5 makes it clear that realized capital gains are a significant part of the income of the well-to-do, comprising more than 20% of their gross income in each of the years studied. For this reason alone, it is important to clarify their role in the high-income Laffer curve and how taxes affect the distribution of income. A key issue here is the responsiveness of capital gains realizations to the tax rate imposed on realized gains and to the differential between the tax rate on capital gains and the tax rate on ordinary income. A high value of the capital gains tax rate provides the incentive to postpone realizing gains, perhaps until the gain is relieved from taxation upon the demise of the holder. A high value of the differential increases the incentive to convert ordinary income into realized capital gains, so as to take advantage of the preferential rate accorded to the gains.

I will not wade far into the large and contentious literature on the tax elasticity of capital gains realizations. I will, though, get my feet wet by characterizing the findings of what, in my opinion, are the two best kinds of empirical studies--aggregate time-series and longitudinal analysis.<sup>17</sup> First is that the timing of realizations is highly sensitive to anticipated changes in capital gains tax rates. The second is that there is also a significant long-run sensitivity of capital gains realizations to a permanent change in capital gains rates; however, this elasticity is less than one, so that in the long run a reduction in rates lowers the revenue collected on realizations.

The data surrounding the recent episodes of anticipated changes in rates--1969-1970, 1978-1979, and 1986-1987--illustrate well the first proposition. In the 1969-1970 and 1986-1987 cases, an anticipated increase in tax rates led to a huge increase in realizations in the year before the rate increase was to take place. An anticipated decrease in tax rates as of 1979 led to a large amount of postponement of gains from 1978 until 1979.

Assessing the magnitude of the relationship between a steady rate of tax and the volume of realizations is a more subtle task, and a perusal of the time series is instructive, though not decisive. Figure 5.1 shows nominal long-term realizations as a fraction of nominal GNP for the

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<sup>17</sup>For an aggregate analysis, see Auerbach (1989). For longitudinal analysis, see Auten and Clotfelter (1982), Slemrod and Shobe (1990), and Auten, Burman, and Randolph (1989).

period 1954 to 1990. This figure suggests dividing 1954 to 1990 into three periods: an upward trend characterizing the period until 1968; large declines in 1969 and 1970 followed by no growth until 1978; and rapid growth beginning in 1979, pushing the 1985 ratio to a high for the period. The 1986 ratio was nearly twice as high again as the previous record level set in 1985, and the post-1986 ratios fell back to below the pre-1986 levels.

It has been duly noted that these periods roughly correspond to eras of capital gains taxation as illustrated in Table 3.2, with the rate on long-term gains being highest in the period 1970 through 1978, when gains were generally low. There are, of course, other reasons why realized gains would be low during this period, including stagnant common stock prices.<sup>18</sup>

While Figure 5.1 shows that aggregate capital gain realizations were relatively low in the 1970s, Tables 4.1 through 4.5 show that it is also true that the share of total gains received by the top 1% of income earners fell during this period. This decline is one of the reasons that the share of the top 1% in total income did not begin to rise until the 1980s.

That the share of total gains of the top 1% would fall in the 1970s is no doubt partially due to the fact that the tax rate on capital gains for high-income taxpayers rose much more than did the tax rate on capital gains for low-income taxpayers. But part of the apparent decrease in the concentration of capital gains in the 1970s could also be due to the phenomenon of rank reversals. Because the top 1% class is defined by income, which includes capital gains, if for any reason capital gains decrease, even proportionately, individuals with relatively high capital gains will tend to drop out of the top 1%, to be replaced by others with relatively less gains. This can be a quantitatively important phenomenon, as the example in Slemrod (1989) shows. There I simulate a 61.2% equi-proportionate increase in all taxpayers' capital gains, plus a 19.5% equi-proportionate increase in other income (the actual aggregate increase in capital gains and other income, respectively, between 1980 and 1983). When taxpayers are ranked by gross income before the equi-proportionate increases, 46% of gains are received by the top 1% of gross income earners. With the equi-proportionate increases, and reranking according to the new gross income,

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<sup>18</sup>Some have argued that high capital gains taxes are a principal cause of low equity prices.

62% of gains are received by the top 1%. This increased share occurs even though the distribution of capital gains is completely unchanged.

One lesson of this example is that the decline in the share of gains received by the top 1% is not necessarily a reflection of a flattened distribution of gains themselves. In fact, Slemrod (1992) shows that the own-Gini coefficient of gains did not change much during the 1970s and 1980s. But the methodological caveat of rank reversals applies much more broadly. For example, an equi-proportionate reduction in capital gains realizations could reduce the apparent concentration of wage and salary income, as measured by the share of wages earned by the top 1% of income earners. This could occur because when capital gains are of lesser importance, ranking by income becomes closer to ranking by non-capital gains income, which is largely wages and salaries. By necessity the concentration of any source of income will look larger when ranked by itself or something highly correlated with itself.

Although the phenomenon of rank reversals potentially clouds the interpretation of the trends in the 1970s, it apparently does not overturn the characterization that the concentration of wages began about 1970 rather than 1980. The own-Gini coefficient for wages began rising as early as 1972, as shown by Slemrod (1992); see also the findings of Feenberg and Poterba (1992) discussed in Section 6.1.

## **6. TAXES AND THE INCREASING CONCENTRATION OF LABOR INCOME**

According to data based on tax returns, the income of the top 1% of American income earners rose appreciably in the period 1977 to 1989, while the average real income of the rest of the population stagnated. One measure of this phenomenon, due to Gramlich, Kasten and Sammartino (1992), is that the share of the top 1% in total income rose from 8.4% in 1977 to 12.4% in 1989, an extraordinary increase by the standards of usually glacial demographic trends. The evidence presented in the previous sections suggests that this trend is really the net result of at least three distinct phenomena: a growing concentration of wages and salaries beginning earlier than 1977; a decline in the volume of capital gain realizations in the 1970s, and a decline in the nominal capital income of the affluent in the 1970s. Only in the 1980s was there a concurrent increase in the

concentration of wages and salaries coupled with an increase in the measured importance of capital income, and thus only in the 1980s did the concentration of overall income become apparent.

In this section I focus on the increasing concentration of labor income, and try to distinguish non-tax and tax explanations for this trend. In the former category are a wide range of hypotheses, including technological change, the globalization of commerce, cohort supply changes, and an increasing return to education. All of these non-tax explanations share one common element--a prediction of a relative increase in the pre-tax return per unit of effort to the types of human capital possessed by high-income individuals. An increased pre-tax return to labor could induce changes in labor supply, depending on the relative strength of the income and price effects. The pure tax explanation is that reduced marginal tax rates have, by increasing the after-tax return to effort, increased both the amount of effort and the fraction of compensation paid in taxable form.

The challenge to the researcher is to identify empirical phenomena which are consistent with one but not the other story. Of course, these two explanations need not be mutually exclusive; it is certainly possible that there has been both an increase in the pre-tax return to high-income occupations and a substantial behavioral response to lower marginal tax rates.

There are, though, some differences in the predictions that accompany the pure versions of these two explanations. Unfortunately, the data is not always available to distinguish the two. For example, in the non-tax explanation, the total pre-tax compensation per unit of effort increases; in the tax explanation it does not. But because there is no reliable data on hours of effort of the affluent across time periods, this explanation cannot be pursued.<sup>19</sup> Lacking that critical set of data, in what follows I look at three possible ways to distinguish the two explanations.

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<sup>19</sup>Of course there is a large literature on labor supply responsiveness to taxes that is not focused on the affluent. See, for example, Burtless (1990) and Macurdy, Green, and Paarsch (1990). But this literature generally does not address whether high-income households' elasticity is different from the nonaffluent population. However, as noted in Section 2, for a tax cut that applies only to the top bracket, a lower elasticity than otherwise is required for an inverse revenue response.

## 6.1 Timing

If the tax story predominates, and if the behavioral response to taxes happens quickly, then the timing of changes in the concentration of income should correspond to the timing of the tax changes in the last fifteen years. If the non-tax story predominates, then only by coincidence would changes in pre-tax income match up with changes in the tax law. Note, though, that most affluent taxpayers are likely to have considerable flexibility regarding the timing of income recognition, not only of capital gains, but of labor income as well. For this reason one must be cautious about data from years immediately before anticipated tax changes and afterwards.

The principal changes of the last three decades were the 1964 act, which dropped the top rate from 91 to 70 percent (77% in 1964) but also featured across-the-board cuts of approximately equal proportions; the 1969 act, which lowered the maximum rate on labor income to between 50 and 60%; the 1981 act, which dropped the top rate on all income to 50%; and the 1986 act, which dropped the top rate from 50 to 28% (38.5% in 1987).<sup>20</sup> Tables 4.1 through 4.5 suggest that the concentration of wages began in earnest between 1970 and 1977, just as the 1969 act was becoming effective. Of course, the precise timing is difficult to judge from snapshots taken every few years. More revealing is a graph from Feenberg and Poterba (1992), reproduced here as Figure 6.1, which plots the fraction of total wages received by those in the top 0.25% of the adult population for adjusted gross income, based on interpolations from published IRS Statistics of Income data. This graph shows a steady increase beginning in 1970, going from 2.5% in that year to 3.7% in 1980. It then continues its growth beyond 1980, rising to 4.4% by 1984, but falling back to 4.0% in 1985. After that it is buffeted about by the timing effects of the 1986 Act, but has jumped to 6.2% in 1990. Their graph reveals no break in wage concentration around 1981, although it is certainly consistent with a steadily increasing amount of concentration beginning about the time of the introduction of the maximum tax on earned income. Of course these are impressions, and not a decisive analysis by any means. Furthermore, because taxpayers are ranked by income rather than wages, the analysis is subject to the bias introduced by rank reversals caused by changes in nonwage income sources.

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<sup>20</sup>There were several other changes along the way. See Pechman (1987) Table A-3, for a chronology.



A rising concentration of wages beginning about 1970 would also correspond with the start of the increase in inequality within groups of similar educational attainment, as discussed in Levy and Murnane (1992). Beginning in the 1980s the return to education also began to grow rapidly, thus adding a compounding increase to the within-educational-group inequality. The fact that the relative earnings of the top 0.25% (or 1%) began around 1970 rather than 1980 suggests that it reflects something other than the increased return to education; that conclusion would undoubtedly be uncontroversial as it applies to baseball players and other entertainers, whose earning power is generally accepted to be unrelated to their educational achievement, but would be controversial as it applies to investment bankers and CEOs.

## 6.2 Other Countries

Finding that other countries whose top tax rates did not fall as in the U.S. also had a similar increase in income growth at the top would undermine the tax explanation. Unfortunately the data is not available to do a precise cross-national comparison that focuses on the top 1% of income earners. What cross-national evidence that does exist, though, suggests that not only the U.S. experienced increased inequality in wages. Gottschalk and Joyce (1991) examined the eight industrial countries in the Luxembourg Income Study<sup>21</sup> and concluded that inequality in the earnings of male family heads rose in almost all of them, and that there were "important changes in the upper end of the distribution. The rich were getting richer in every country except France..." (p. 16).

Although suggestive, these conclusions need to be qualified in at least two ways. First, because of the problem of top-coding of income measures from surveys, Gottschalk and Joyce excluded the top five percent of the distribution in every country and every year. Thus those data are not helpful in assessing income distribution questions specifically referring to the top 1%. Second, in the 1980s some of the seven other countries also flattened the dispersion of marginal tax rates, though none did so to the extent of the U.S.<sup>22</sup>

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<sup>21</sup>Besides the U.S., the countries included were Australia, Canada, France, Germany, the Netherlands, Sweden, and the United Kingdom.

<sup>22</sup>See Whalley (1990) for a cross-national chronology of income tax changes in the 1980s.

### 6.3 Trends in the Composition of the Compensation of the Rich

One distinguishing characteristic of the tax explanation for the increasing concentration of labor income is its prediction that, as marginal tax rates fall, high-income individuals would reduce the fraction of compensation that is received in nontaxable or tax-preferred form. This means a lower fraction of compensation received as fringe benefits, including deferred compensation, and in the form of stock options and other forms of preferentially-taxed executive compensation.

If this has happened, and concomitantly the share of wages and salaries in the compensation of the affluent has increased, then it would almost certainly show up in the data as an increased concentration of wages and salaries. There should, of course, be an offsetting decrease in the concentration of non-wage-and-salary compensation, but that is much less likely to show up in the available data on annual incomes, given its nature as fringe benefits and deferred compensation.

I can find no evidence that high-income American households have significantly increased the fraction of their labor compensation received as wages and salaries.<sup>23</sup> I have chosen the wording of the last sentence carefully, because I also have not found definitive evidence to rule out such a trend. Although there is data on the recent trends in average compensation in such high-paying occupations as physicians and professional athletes, there is very little breakdown of compensation into immediately taxable salaries and other types of compensation.

There is some sketchy evidence on trends in the composition of executive compensation. The fraction of top executives from the largest 1,000 American corporations that have some stock

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<sup>23</sup>There is empirical support that, for the population as a whole, higher marginal tax rates are associated with a higher fraction of compensation received as fringe benefits. See, for example, Turner (1987) who concludes from an analysis of time-series data that the tax elasticity of the fringe share is about 0.2. Taken literally, an elasticity of 0.2 implies that a decline of the marginal tax rate from 0.7 to 0.28, or 60%, would reduce the share of fringes by about 12%, which would raise the share of non-fringe compensation by about one percent. Note, though, that Turner's data, because it pertained to the entire population, did not include observations of tax rates over 0.4, so that a simple extrapolation of results to high-income individuals may be unwarranted.

Bloom and Freeman (1992) document that during the 1980s the proportion of workers covered by pension plans and the proportion of total employee compensation taking the form of employer contributions to retirement plans both fell significantly. They dismiss the role of tax changes in this development, mainly because the 1980s fall in pension coverage was smallest among high-income workers, for whom marginal tax rates declined the most.

option plan was constant in the early to mid-1970s, fell in the late 1970s when the tax advantages were sharply curtailed, and has risen continuously in the 1980s until the fraction stood at 77% in 1990, the highest level in two decades.<sup>24</sup> Forbes Magazine annually publishes information on the compensation packages of the top 500 firms in the U.S. This data shows no change between 1982 and 1991 in the fraction of total compensation that is fully taxable salary or bonus for the top 50 highest compensated CEOs (23%). The problem with this and similar data is that compensation through stock options is valued at the realized sales price at the time of the exercise of the option, rather than as the expected value of the option at the time it is granted. Thus the data are biased toward including CEOs that exercised stock options, and thus overstates the average importance of stock options. The apparent importance of stock options will also depend on how well the stock market has performed in the recent past. All these caveats notwithstanding, I can offer no evidence that the relative importance of fully taxable wages and salaries for the affluent has increased in recent decades, as their marginal tax rates have fallen.

## 7. SUMMARY AND CONCLUSIONS

In this paper I set out to shed light on two, possibly related, issues--the high-income Laffer curve and the apparent increasing concentration of income. The research has been more successful in highlighting the scarcity of information needed to reliably address these issues than it has in providing definitive answers. Nevertheless, some tentative conclusions can be offered.

A prime motivation for of the paper was that, because the rich have relatively more capital income and perhaps more flexibility in both financial matters and in the form of labor compensation, it is dangerous to rely on behavioral elasticities estimated from the population as a whole. Comparing portfolios of the affluent in the 1980s to the higher-tax era of the early 1960s reveals no noticeable shift out of tax-exempt securities toward taxable securities, and no increase in the relative nominal rate of taxable return of the affluent. I can thus find no evidence that taxable capital income would fall sharply in response to higher tax rates. Capital gains realizations, which are largely a phenomenon of the affluent, were noticeably lower in the 1970s, a decade which,

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<sup>24</sup>This data is taken from selected editions of Top Executive Compensation, published by the Conference Board.

among other characteristics such as a falling stock market, featured relatively high capital gains taxation. The increasing concentration of wage and salary income appears to have begun around 1970, about the time of the introduction of the maximum tax on earned income and predating the cuts in top tax rates beginning in 1982. I could find no indication that the fraction of compensation of the affluent that is received in the form of wages and salaries has increased as their marginal tax rate has declined.

In sum, with respect to two aspects that differentiate the rich from the nonrich--the importance of capital income and the flexibility of the form of compensation--I have uncovered no evidence of a significant behavioral response to the marginal tax rate. There is, however, evidence of a significant response of capital gains realizations to the tax on capital gains; exactly how substantial the long-run elasticity is remains a controversial issue. Thus, in assessing the behavioral response of the affluent, it is important to consider separately the marginal tax rate on ordinary income and the effective tax rate on capital gains.

An important lesson is that the effect of changing tax rates on revenue must be kept conceptually distinct from its effect on the measured distribution of income. This is especially important with regard to capital gains. While capital gains realizations may be the most tax-responsive element of taxable income, they definitely should not be included in a measure of income used to assess year-to-year changes in income concentration. If, for whatever reason, capital gains realizations increase, the resulting increase in the tax concentration of measured income does not necessarily reflect an increase in the concentration of economic welfare. This problem is understood by researchers who avoid analyzing years of extraordinary capital gains activity such as 1986, but the problem is more general. Because of rank reversals, including capital gains in a measure of income will also bias measures of concentration of other sources of income such as wages.

The same caveat applies, to a lesser extent, to capital income other than capital gains. The relationship between real capital income and nominal taxable capital income is a tenuous one, influenced by inflation, taxation and other factors. Discarding taxable capital income as a reliable

measure of real income leaves the distribution of wealth and the distribution of labor income as the building blocks of a proper distributional analysis. Future research on how these have changed, and the role of taxation in their evolution, will require better data and attention to the life-cycle structure of savings and capital accumulation.

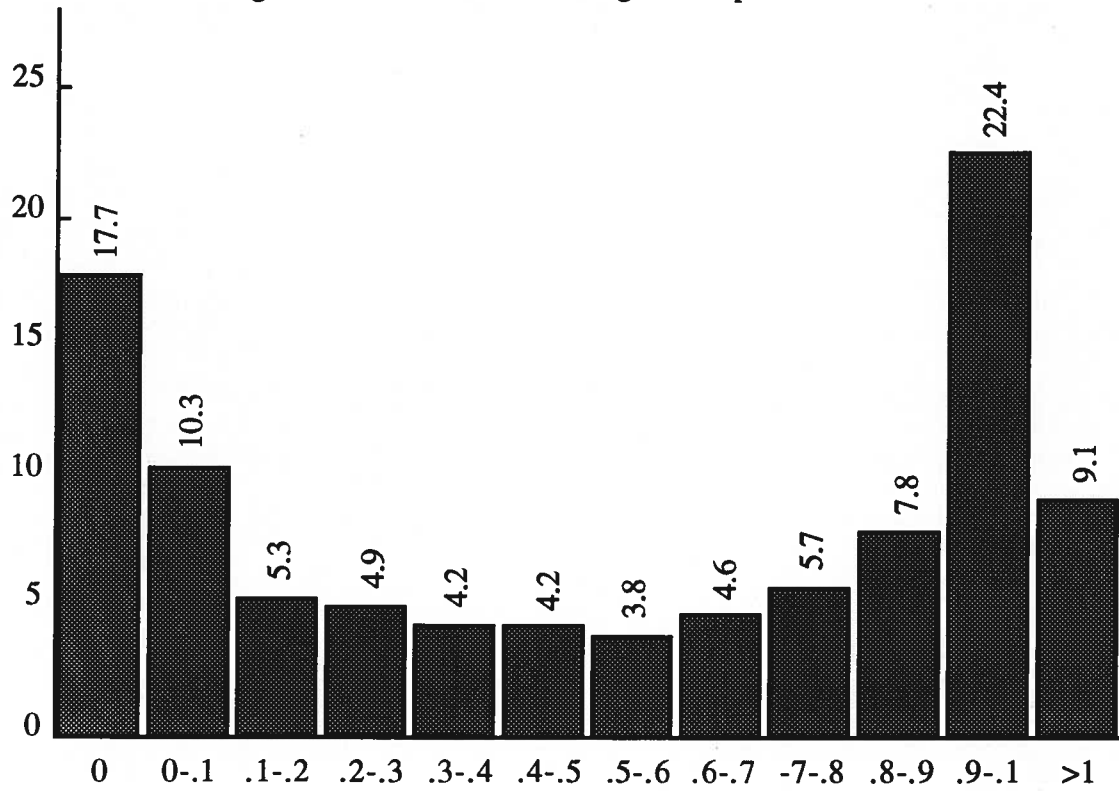
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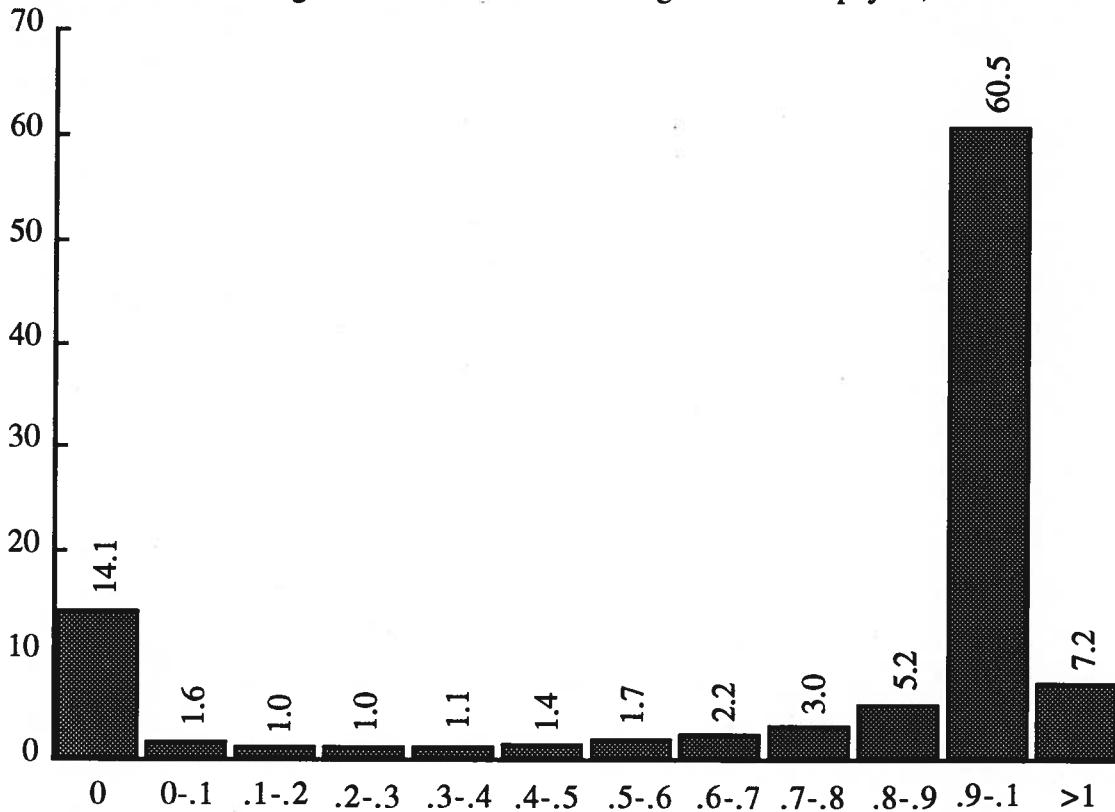
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**FIGURE 2.1**

Distribution of Wage to Gross Income Percentage for Top 1% of Income Earners, 1988



Distribution of Wage to Gross Income Percentage for All Taxpayers, 1988

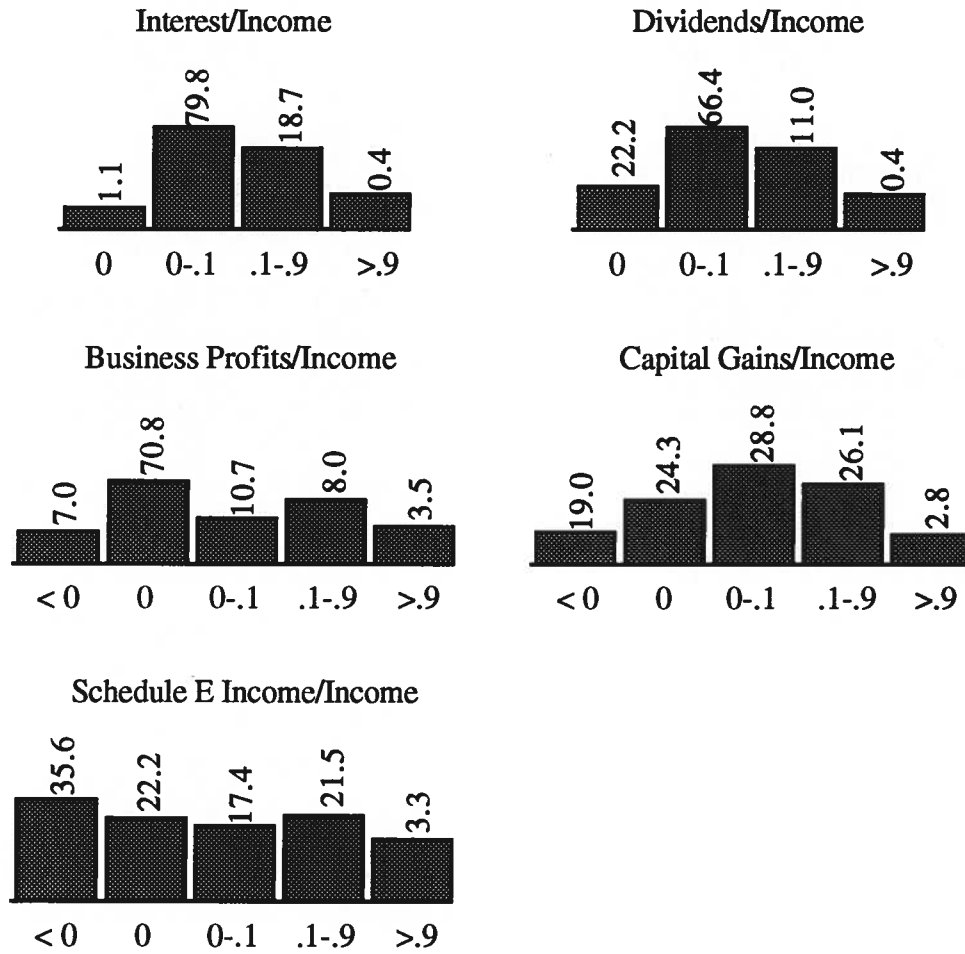


Source: Tabulations from 1988 Individual Model File



**FIGURE 2.2**

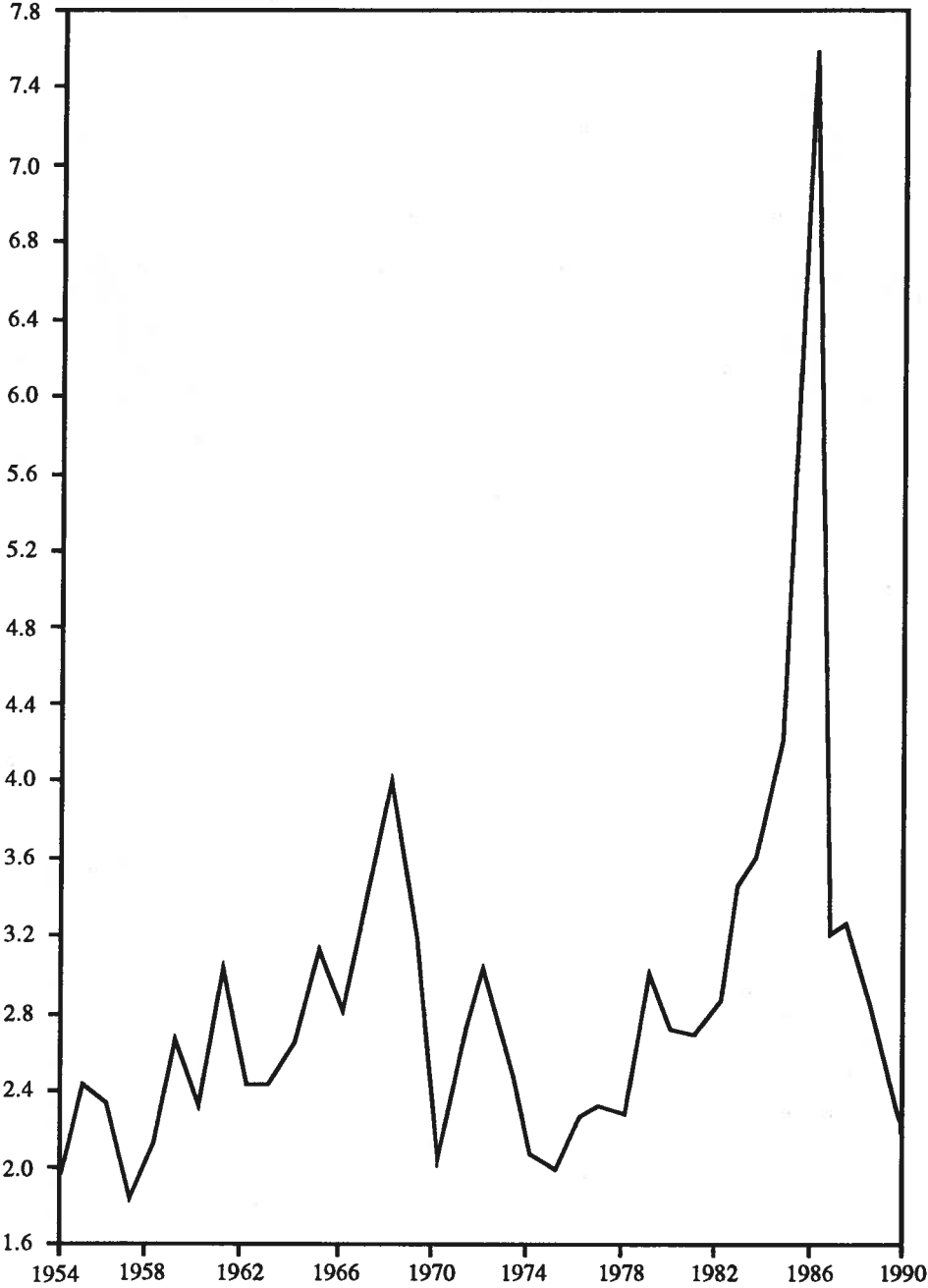
Distribution of the Percentage of Various Sources of Income to Income for the Top 1%, 1988



Source: Tabulations from 1988 Individual Model File.

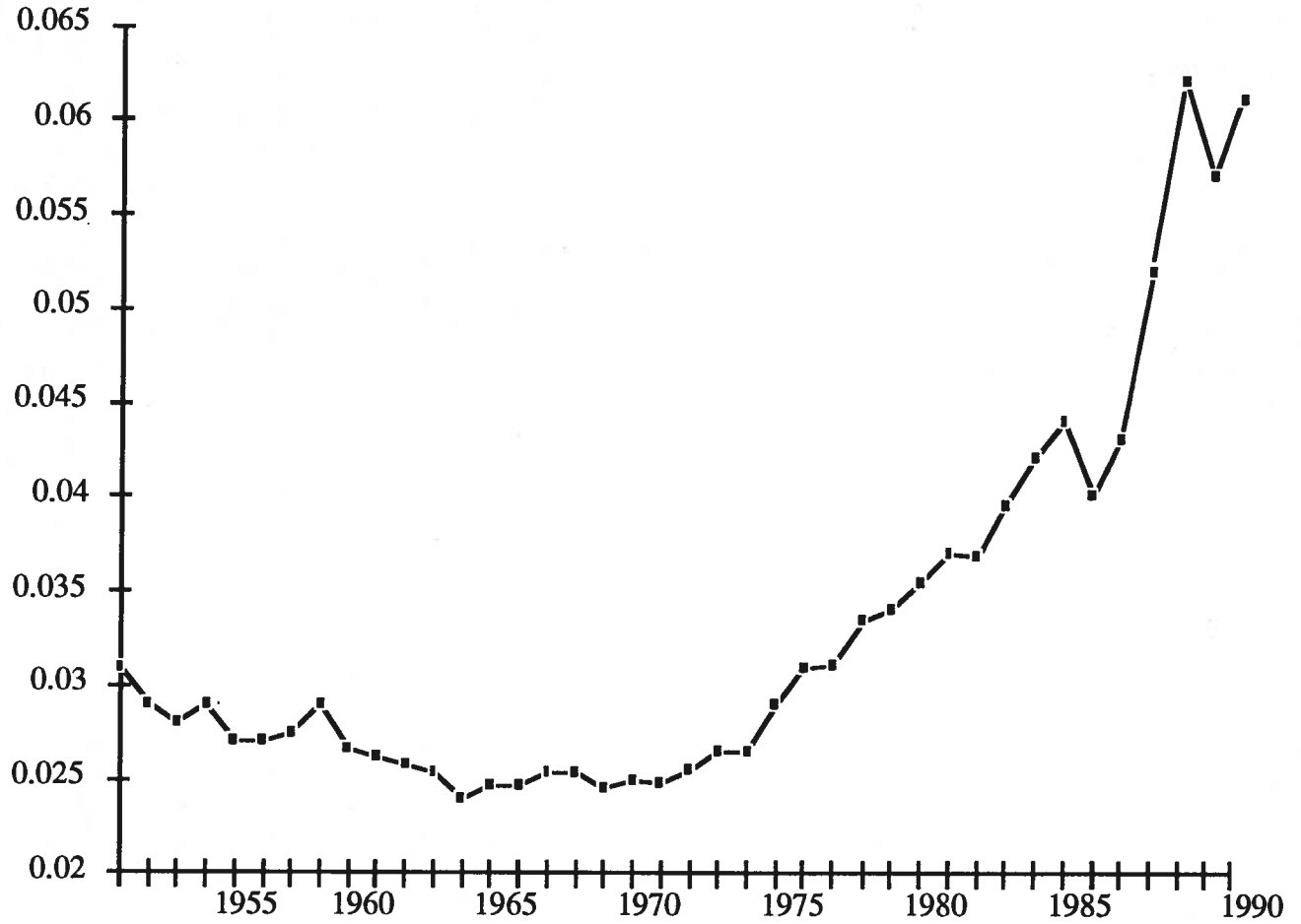
**FIGURE 5.1**

Long-Term Capital Gains Realizations as a Percentage of GNP, 1954-1990



**FIGURE 6.1**

Share of Wages Received by  
Top 0.25% of Adult Population, 1951-1990



Source: Figure 6 in Feenberg and Poterba (1992).

**TABLE 2.1**

Distribution of Age and Occupation for High-Income and All Families, 1982

<u>Age of head (years)</u>	High Income	All
Less than 25	0	8
25-34	1.5	23
35-44	15.5	20
45-54	28.5	16
55-64	34.5	15
65-74	17	12
75 or more	<u>3.5</u>	<u>7</u>
	100	100
 <u>Education of Head</u>		
0-12 years	4.5	60
Some college	12	17
College degree	33	13
Some graduate school	<u>52</u>	<u>10</u>
	100	100
 <u>Occupation of head</u>		
Not working	8	31
Clerical or sales	1.5	8
Craftsman or foreman	0	12
Operative, labor, or service work	0	18
Lawyer or accountant	12	1
Health service professional	5	1
Banking, insurance, or real estate	24	2
Other professional or managerial, not self-employed	23	17
Other professional or managerial, self-employed	<u>25.5</u>	<u>10</u>
	100	100

Source: Computed from Table 1 in Avery and Elliehausen (1986), p. 165.

**TABLE 2.2**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1988

	Top 1%	All
Salaries and Wages	43.4	75.9
Taxable Interest	7.6	6.1
Dividends	5.8	2.5
Net Capital Gain	22.1	5.0
Pensions and Annuities	1.5	4.5
Rents, Royalties, Trust, and Partnership Income	12.6	2.9
Business Profit	4.8	4.1

Source: Tabulations from Individual Model File, 1988.

**TABLE 3.1**

Marginal Tax Rates for Married Taxpayers Filing Jointly, 1962, 1977, 1982, and 1988

AGI (in 1988 Dollars)	Marginal Tax Rates (percent)			
	1962	1977	1982	1988
5,000	0	0	0	0
10,000	18	0	14	15
20,000	18	17	19	15
35,000	20	25	29	15
50,000	26	32	39	28
75,000	34	42	44	28
100,000	43	50	49	33
150,000	53	55	50	33
250,000	62	64	50	28
500,000	78	70	50	28
1,000,000	89	70	50	28
2,000,000	91	70	50	28

Note: Calculations assume that the couple does not itemize, that they claim two exemptions (for themselves), and that they do not receive the earned income tax credit or use the alternative minimum tax.

Sources: Individual income tax forms from Statistics of Income, Individual Income Tax Returns, Department of the Treasury, Internal Revenue Service. Consumer Price Index from the Economic Report of the President, 1992, Table B-56.

**TABLE 3.2**

**Average Effective Marginal Tax Rates on Long-Term Capital Gains for High-Income Individuals,  
1965-1989**

1965	25.3	1970	32.0	1975	34.7	1980	27.6	1985	20.0
1966	25.3	1971	33.9	1976	37.3	1981	24.2	1986	20.0
1967	25.3	1972	34.6	1977	41.2	1982	20.0	1987	28.0
1968	27.1	1973	35.0	1978	39.1	1983	20.0	1988	28.0
1969	27.7	1974	34.4	1979	26.9	1984	20.0	1989	28.0

Source: Lindsey (1987), Table 3.5, page 85. Refers to households with income over \$1,000,000; updated past 1982 by the author.

**TABLE 3.3**

**Average Marginal Tax Rates on Earned Income, 1980**

<u>Marginal Rate (%)</u> <u>without Maximum Tax</u>	<u>Average Marginal Rate</u> <u>with Maximum Tax</u>
50-51	50.5
51-52	51.5
52-54	51.6
54-56	53.5
56-60	55.5
60-65	56.5
65-70	58.6
over 70	59.1

Source: Calculated from Lindsey (1981), Table 1, assuming midpoint for tax rate ranges, 48% for "under 50%" category, and 72 for "over 70%" category.



**TABLE 4.1**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1962  
(Billions of current, 1962 dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Gross Inc.	Sum	% of Gross Inc.	
Gross Income	33.4	100.0	354.9	100.0	9.4
Salaries and Wages	10.2	30.5	282.1	79.5	3.6
Interest	1.2	3.5	7.1	2.0	16.9
Dividends	5.4	16.2	11.3	3.2	47.8
Pensions and Annuities	0.1	0.3	2.3	0.6	4.4
Partnership Net Profit	3.5	10.6	9.5	2.7	36.8
Net Capital Gain	7.3	21.9	12.3	3.5	59.3
Business or Farm Net Profit	4.4	13.1	24.4	6.9	18.0
Rents, Royalties, Estate, Trust and Other Income	1.4	4.2	6.4	1.8	21.9

Note: The first row of each column does not represent the sum of the column due to missing categories, elimination of the dividend exclusions, and rounding.

Source: Tabulated from 1962 Individual Model File, Statistics of Income Division, U.S. Treasury Department, Internal Revenue Service.

**TABLE 4.2**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1970  
(Billions of current, 1970 dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Gross Inc.	Sum	% of Gross Inc.	
Gross Income	62.2	100.0	689.2	100.0	9.0
Salaries and Wages	21.5	34.6	565.2	82.0	3.8
Interest	3.4	5.5	24.2	3.5	14.1
Dividends	7.2	11.6	16.7	2.4	43.1
Pensions and Annuities	0.3	0.5	9.7	1.4	3.1
Partnership Net Profit	9.6	15.4	20.9	3.0	45.9
Net Capital Gain	15.5	24.9	28.1	4.1	55.2
Business Net Profit	8.3	13.3	38.7	5.6	21.5
Farm Net Profit	0.8	1.3	8.7	1.3	9.2
Rents, Royalties, Estate, and Trust Income	2.4	3.9	11.0	1.6	21.8

Note: The first row of each column does not represent the sum of the column due to missing categories, elimination of the dividend exclusions, and rounding.

Source: Tabulated from 1970 Individual Model File, Statistics of Income Division, U.S. Treasury Department, Internal Revenue Service.

**TABLE 4.3**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1977  
(Billions of current, 1977 dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Gross Inc.	Sum	% of Gross Inc.	
Gross Income	103.5	100.0	1,180.8	100.0	8.8
Salaries and Wages	46.0	44.4	969.4	82.1	4.7
Interest	6.1	5.9	54.6	4.6	11.2
Dividends	11.5	11.1	28.5	2.4	40.4
Pensions and Annuities	0.7	0.7	29.2	2.5	2.4
Partnership Net Profit	5.5	5.3	13.3	1.1	41.4
Net Capital Gain	21.0	20.3	42.2	3.6	49.8
Business Net Profit	9.4	9.2	49.5	4.2	19.0
Farm Net Profit	-0.2	-0.2	0.5	0.0	NA
Rents, Royalties, Estate, and Trust Income	2.9	2.8	8.0	0.7	36.3

Note: The first row of each column does not represent the sum of the column due to missing categories, elimination of the dividend exclusions, and rounding.

Source: Tabulated from 1977 Individual Model File, Statistics of Income Division, U.S. Treasury Department, Internal Revenue Service.

**TABLE 4.4**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1982  
(Billions of current, 1982 dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Gross Inc.	Sum	% of Gross Inc.	
Gross Income	199.9	100.0	1,903.8	100.0	10.5
Salaries and Wages	88.3	44.2	1,565.0	82.2	5.6
Interest	20.3	10.2	157.0	8.2	12.9
Dividends	19.5	9.8	54.0	2.8	36.1
Pensions and Annuities	1.6	0.8	60.1	3.2	2.7
Partnership Net Profit	3.3	1.7	-1.6	-0.1	NA
Net Capital Gain	57.6	28.8	85.6	4.5	67.3
Business Net Profit	7.7	3.9	50.6	2.7	15.2
Farm Net Profit	-1.2	-0.6	-9.8	-0.5	NA
Rents, Royalties, Estate, and Trust Income	6.0	3.0	3.6	0.2	166.7

Note: The first row of each column does not represent the sum of the column due to missing categories, elimination of the dividend exclusions, and rounding.

Source: Tabulated from 1988 Individual Model File, Statistics of Income Division, U.S. Treasury Department, Internal Revenue Service.

**TABLE 4.5**

Composition of Gross Income for Top 1% of Income Earners and All Taxpayers, 1988  
(Billions of current, 1988 dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Gross Inc.	Sum	% of Gross Inc.	
Gross Income	474.1	100.0	3,082.3	100.0	15.4
Salaries and Wages	205.6	43.4	2,338.4	75.9	8.8
Interest	36.0	7.6	187.0	6.1	19.3
Dividends	27.5	5.8	77.6	2.5	35.4
Pensions and Annuities	7.3	1.5	138.8	4.5	5.3
Partnership Net Profit	54.2	11.4	55.6	1.8	97.5
Net Capital Gain	104.6	22.1	153.0	5.0	68.4
Business Net Profit	22.6	4.8	125.8	4.1	18.0
Farm Net Profit	-0.3	-0.1	-1.2	0.0	NA
Rents, Royalties, Estate, and Trust Income	5.2	1.1	-4.1	-0.1	NA

Note: The first row of each column does not represent the sum of the column due to missing categories, elimination of the dividend exclusions, and rounding.

Source: Tabulated from 1988 Individual Model File, Statistics of Income Division, U.S. Treasury Department, Internal Revenue Service.

**TABLE 4.6**

Composition of Net Worth of Top 1% of Income Earners and All Households, 1962  
(Billions of Current, 1962, dollars)

	Top 1%		All		Share of Top 1%
	Sum	% of Net Worth	Sum	% of Net Worth	
Net Worth*	259.9	100	1188.0	100	21.9
Gross Asset Values:					
Principal Residence	24.6	9.5	460.2	38.7	5.4
Other Real Estate	29.2	11.2	128.2	10.8	22.8
Stocks	99.9	38.4	222.6	18.7	44.9
U.S. Gov't Bonds	2.5	1.0	26.6	2.2	9.4
State and Local Bonds	10.8	4.2	12.7	1.1	85.0
Other Marketable Securities	4.3	1.7	12.6	1.1	34.1
Checking Accounts	5.6	2.2	23.7	2.0	23.6
Savings Accounts	6.1	2.3	104.8	8.8	5.8
Net Business/Profession	81.1	31.2	224.8	18.9	36.1
Net Business Not Managed by Family	4.5	1.7	43.9	3.7	10.3
Automobiles	1.7	0.7	55.0	4.6	3.1
Liabilities:					
Debt on Principal Residence	4.2	1.6	143.8	12.1	2.9
Debt on Real Estate	6.8	2.6	26.0	2.2	26.2
Other Debt	8.8	3.3	52.2	4.4	16.9

\*Net worth includes all assets less all debt in the Survey, except the value of pensions and life insurance, which are excluded from the Survey's definition of wealth due to misreporting and nonresponse.

Note: Columns do not sum to totals due to excluded categories.

Source: Tabulated from 1962 Survey of Financial Characteristics of Consumers, Board of Governors of the Federal Reserve System.

**TABLE 4.7**

Composition of Net Worth of Top 1% of Income Earners and All Households, 1983  
(Billions of Current, 1983, dollars)

	Sum	Top 1% % of Net Worth	All Sum	All % of Net Worth	Share of Top 1%
Net Worth*	2240.1	100	9820.5	100	22.8
Gross Asset Values:					
Principal Residence	252.9	11.3	3738.5	38.1	6.8
Other Real Estate	331.9	14.8	1687.5	17.2	19.7
Stocks	500.7	22.4	1041.1	10.6	48.1
U.S. Gov't Bonds	2.0	0.1	27.3	0.3	7.3
State and Local Bonds	93.3	4.2	204.6	2.1	45.6
Other Marketable Securities	49.7	2.2	162.4	1.7	30.6
Checking and Money Market Accounts	84.3	3.8	395.6	4.0	21.3
Savings Accounts and CD's	33.4	1.5	581.4	5.9	5.7
Net Business/Profession	581.0	25.9	1924.4	19.6	30.2
Net Business Not Managed by Family	117.2	5.2	360.0	3.7	32.6
Automobiles	10.8	0.5	373.3	3.8	2.9
Liabilities:					
Debt on Principal Residence	40.1	1.8	864.6	8.8	4.6
Debt on Other Real Estate	58.7	2.6	324.1	3.3	18.1
Other Debt	29.8	1.3	260.6	2.8	11.4

\*Net worth includes all assets less all debt in the Survey, except the value of pensions and life insurance, which are excluded for comparability with the 1962 Survey data.

Note: Columns do not sum to totals due to excluded categories. Income data are 1982 earnings, while wealth is current wealth at the time of the interview (between February and July, 1983).

Source: Tabulated from 1983 Survey of Consumer Finances, Board of Governors of the Federal Reserve System.

**TABLE 4.8**

Composition of Net Worth of Top 1% of Income Earners and All Households, 1989  
(Billions of Current, 1989, dollars)

	Top 1%		All		Share of Top 1%
	Holdings	% of Net Worth	Holdings	% of Net Worth	
Net Worth	4155.3	100	16459.2	100	25.3
Gross Asset Values:					
Homes	470.9	11.3	6391.3	38.8	7.4
Other Real Estate	1057.1	25.4	2983.6	18.1	35.4
Stocks	332.4	8.0	918.6	5.6	36.2
Taxable Bonds	152.2	3.7	286.8	1.7	53.1
Nontaxable Bonds	206.1	5.0	407.4	2.5	50.6
Trusts	124.8	3.0	350.3	2.1	35.6
Life Insurance	40.6	1.0	350.7	2.1	11.6
Checking and Money Market Accounts	207.5	5.0	859.8	5.2	24.1
Savings Accounts and CDs	80.5	1.9	864.8	5.3	9.3
Business	1576.4	37.9	3511.0	21.3	44.9
Vehicles	40.5	1.0	754.0	4.6	5.4
Liabilities:					
Mortgages	89.8	2.2	1615.9	9.0	5.6
Debt on other Real Estate	323.8	7.8	745.7	4.5	43.4

Source: Tabulations of 1989 Survey of Consumer Finances data provided by John Karl Scholz.

Note: Columns do not sum to totals due to excluded categories.



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