# THE DISTRIBUTION OF BENEFITS FROM A REDUCTION IN THE TAX RATE ON CAPITAL GAINS

Staff Memorandum

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The Congress of the United States Congressional Budget Office This Congressional Budget Office Staff Memorandum addresses questions that have been raised about the distribution of capital gains. It has been prepared by Larry Ozanne of the Tax Analysis Division under the supervision of Rosemary Marcuss and Joseph Cordes. Questions regarding the memorandum should be addressed to Larry Ozanne or Joseph Cordes at 226-2680.

The question of who would benefit from a reduction in the tax rate on capital gains has received widely different answers. For example, an editorial in *The Wall Street Journal* on August 25, 1989, stated that taxpayers with over \$200,000 of income would receive just under 25 percent of the benefits while a table, dated July 24, 1989, distributed by the Joint Committee on Taxation (JCT) showed the same group receiving just over 60 percent of the benefits.

Differences of this sort arise from the use of different measures of income when distributional analyses of tax return data are made. Such studies typically group taxpayers by income and approximate benefits by the amount of capital gains each group realizes. While adjusted gross income (AGI) is the primary measure of income available on tax returns, it is an imperfect measure of broadly defined economic income. As a result, studies of who benefits often make adjustments to AGI before grouping taxpayers. Disparities, such as those between the result reported in *The Wall Street Journal* editorial and the JCT table, reflect different ways of making such adjustments.

This paper provides a guide for interpreting divergent answers to the question of who benefits from a capital gains tax reduction. It explains why AGI is an imperfect measure of income and shows how the use of alternative measures affects the distribution of capital gains. Two main alternatives are examined. The first is expanded AGI that adds omitted sources of income to AGI and removes passive losses resulting from tax shelters. The second is expanded AGI less realized capital gains. The paper also discusses the use of two narrower measures of income, unadjusted AGI less capital gains, and income from wages and salaries.

Distributions of realized capital gains by income group are shown for 1985 and 1990 using measures of income based on the adjustments in AGI described above. Distributions for 1985 are shown because they have figured prominently in the current debate about who benefits from capital gains tax reductions. Distributions based on 1985 data projected to 1990 are shown because income growth and tax reform have lessened the relevance of 1985 data for assessing changes in current tax law.

Using expanded AGI rather than AGI increases the estimated concentration of capital gains among higher income groups. Removing capital gains from expanded AGI has the opposite effect. While expanded AGI is a better measure of income than AGI, it is unclear whether excluding capital gains from expanded AGI provides a more accurate indicator of the distribution of capital gains. As a result, using annual tax return data to determine who benefits from capital gains tax cuts provides a range of results, depending on whether one groups by expanded AGI or expanded AGI less capital gains.

Regardless of whether capital gains are distributed by expanded AGI or expanded AGI less capital gains, tax return data show that the benefits of capital gains tax reductions are concentrated among taxpayers with the highest incomes. Grouping taxpayers by income measures that are narrower than expanded AGI or expanded AGI

less gains results in estimated distributions of gains that understate the concentration of capital gains among those with high incomes.

The basic finding from tax return data is further supported by data on who owns capital assets. While those who realize capital gains in a particular year are the most immediate beneficiaries of reductions in capital gains taxes, taxpayers with unrealized capital gains are potentially better-off. The distribution of asset ownership is thus another indicator of who benefits from a tax change. Evidence from a survey of asset ownership shows that, like the distribution of realized capital gains, ownership of capital assets is concentrated among taxpayers with high incomes.

# Measuring Income

A person's yearly economic income can be thought of as the amount that he or she can spend in a year without drawing down existing wealth or going further into debt. This amount equals the value of the person's actual consumption plus any change in the person's net worth. For example, if a person spends \$9000 on consumption and saves an additional \$1000, then his or her income is \$10,000. Alternatively, if the person spends \$9000 on consumption but borrows or reduces savings by \$1000 to do so, then income is \$8000. A change in net worth also includes any change in the market value of an asset—that is, any capital gain or loss. If the person owns 100 shares of stock in a company and the price per share rises by \$1 over a year, the person's income from this source is \$100. Alternatively, if any asset falls in value, the decline is subtracted from income. In principle, capital gains or losses count as income whether or not the assets are sold and the gain or loss is realized.

In practice, income is not measured by a person's consumption plus his or her change in net worth. Instead, income is measured by adding up the sources contributing to one's ability to spend or save-wages, interest, dividends, Social Security benefits, and so forth. The more income sources included, the closer the income measure is to economic income.

Taxpayers calculate AGI by adding together various sources of income subject to tax, but the definition of income for tax purposes differs in important ways from the broader concept of economic income. To cite a few examples, interest received on state and local government bonds is omitted, accelerated depreciation and other incentives for capital formation understate income or overstate loss from certain investments, and the capital gains included in AGI are only those realized through a sale rather than those accrued in the year.

# From AGI to Expanded AGI

To adjust for the shortcomings in AGI, the Treasury Department, the Joint Committee on Taxation, and the Congressional Budget Office all have developed measures of expanded AGI. These measures add to AGI some omitted items and exclude certain tax losses now included in AGI. The resulting measures of expanded AGI are frequently used for distributional studies.

The expanded AGI measure used by the Congressional Budget Office, which is similar to that used by the Treasury and JCT, modifies AGI by:

- Adding untaxed income such as tax-exempt interest, the untaxed portion of Social Security benefits, and other nontaxable transfer payments. For years before 1987, the untaxed portions of capital gains, dividends, and unemployment compensation are also added.
- Adding adjustments to income such as deductible IRA and Keogh contributions, and for years before 1987, the second-earner deduction.
- Adding back certain losses that have been subtracted from AGI such as passive partnership losses and rental losses.

Adding Untaxed Income and Adjustments. The first two additions bring AGI closer to income as commonly understood and as defined above. Amounts of most items are available on tax returns and can simply be added to AGI. Amounts of tax-exempt income and Social Security benefits have been imputed to tax records from other surveys because this information is not available on tax returns (information on tax-exempt interest is available for 1987 and later returns).

Although CBO, the Treasury, and the JCT all include realized capital gains in their measures of expanded income, some analysts have questioned the appropriateness of doing so when capital gains themselves are being distributed by income. This issue is explored in more detail below.

Adding Partnership and Rental Losses. Adding back passive partnership and rental losses to AGI adjusts AGI for the effects of tax shelters. Before the Tax Reform Act of 1986, the tax code provided highly accelerated depreciation deductions for buildings and equipment. By allowing taxpayers to deduct an amount in excess of true economic depreciation from gross income earned in the early years of an investment, such deductions resulted in a significant understatement of the net income earned from certain investments, thereby creating opportunities for deferring taxes. The benefits of deferral were further magnified because interest expenses incurred to finance taxpreferred investments were also deductible. In many cases, the combination of accelerated depreciation deductions and deductions for interest expense resulted in tax shelter losses that were fully deductible against the taxpayer's other income, even though no economic loss was incurred. In the most extreme cases, tax shelter losses created

situations in which taxpayers with very high economic incomes reported AGI that was zero or even negative.

For tax years after 1986, the presence of tax shelter losses should be a smaller source of difference between AGI and economic income. One reason is that tax reform adjusted depreciation deductions to conform more closely with the underlying economic depreciation of buildings and equipment. Another is that tax reform included new rules on passive losses that limit the ability of taxpayers to reduce AGI by deducting losses from tax shelter investments. In 1990, only 10 percent of passive losses will be deductible against other income.

# AGI and Expanded AGI in 1985

The effects of measuring income by expanded AGI instead of AGI can be seen in distributions of taxpayers and realized gains for 1985. Tax return data from this year have frequently been used in the current debate over a capital gains tax reduction.

As shown in Table 1, grouping taxpayers by expanded AGI instead of AGI reduces the percentage of taxpayers in the lowest income class from 32.7 percent to 27.8 percent and increases the percentage in all the other classes by small amounts. The 4.9 percent of taxpayers who appeared relatively poor in terms of AGI move up the income distribution to varying degrees when AGI is expanded. Some move up one or two classes when Social Security benefits are included in income. Others shift up many classes when large losses are removed from AGI and tax-exempt interest is added. A small percentage of taxpayers in higher AGI classes also move upward, some just one bracket and others several brackets, but their places are taken by those in lower AGI brackets.

Although the movement of taxpayers into higher income classes under expanded AGI is modest, it has a pronounced effect on the percentage of realized capital gains received by taxpayers with incomes of \$200,000 or more. As Table 1 shows, expanding AGI increases the percentage of taxpayers with incomes of \$200,000 or more from 0.3 percent to 0.5 percent, while it raises the fraction of capital gains received by this income class from 44.4 percent to 57.6 percent. The amount of capital gains realized in all other classes changes little, with reductions for all income classes under \$75,000. The largest reduction is 5.8 percentage points in the lowest income class.

The shift of capital gains toward the highest income class results from including tax-exempt interest income and excluding tax shelter losses. Taxpayers with large amounts of tax-exempt interest are also likely to realize large amounts of capital gains, while taxpayers whose measure of AGI is lowered by tax shelter losses are also likely to realize capital gains when such investments are sold. The shift shows the importance of using an expanded measure of AGI to distribute capital gains in years like 1985 when the tax code includes provisions that magnify the difference between AGI and economic income. Regardless of whether taxpayers are grouped by AGI or by expanded AGI, however,

realized capital gains are highly concentrated among taxpayers in the highest income class.

TABLE 1. Distribution of Taxpayers and Capital Gains by AGI and Expanded AGI, 1985

|                       | Тах  | pavers<br>Expanded | <u>Realized Capital Gains</u><br>Expanded |      |  |
|-----------------------|------|--------------------|---|------|--|
| Income Range          | AGI  | AGI                | <u>A</u> GI                               | ÄGI  |  |
| Less than \$ 10,000   | 32.7 | 27.8               | 8.5                                       | 2.7  |  |
| \$ 10,000 - \$ 20,000 | 25.1 | 25.2               | 3.7                                       | 1.7  |  |
| \$ 20,000 - \$ 30,000 | 16.2 | 17.4               | 4.2                                       | 2.5  |  |
| \$ 30,000 - \$ 40,000 | 11.4 | 12.1               | 4.8                                       | 3.2  |  |
| \$ 40,000 - \$ 50,000 | 6.6  | 7.1                | 4.6                                       | 2.8  |  |
| \$ 50,000 - \$ 75,000 | 5.5  | 6.7                | 10.0                                      | 7.7  |  |
| \$ 75,000 - \$100,000 | 1.2  | 1.8                | 6.1                                       | 7.0  |  |
| \$100,000 - \$200,000 | 0.9  | 1.3                | 13.6                                      | 14.8 |  |
| \$200,000 or more     | 0.3  | 0.5                | 44.4                                      | 57.6 |  |
| Total                 | 100  | 100                | 100                                       | 100  |  |

SOURCE: Congressional Budget Office tax simulation models.

# Expanded AGI With and Without Capital Gains

As pointed out above, annual economic income would include capital gains accrued during the year. AGI, however, includes gains realized in the year because only realized gains are taxed. The information needed to adjust AGI to reflect more accurately accrued rather than realized gains is not available. Given the data limitations, the best that one can do is to use measures of income that bracket the actual concentration of gains among those with the highest incomes.

Keeping realized gains in expanded AGI probably overstates the concentration of gains among those with the highest incomes. Some taxpayers have one major asset that they hold for years before selling—for example, family farms, businesses, and homes. When they sell these assets, the gain they realize is the sum of gains accrued over many years rather than a single year. As a result, including the full realized gain overstates economic income in the year of sale and therefore causes realized gains to appear to be more concentrated at higher incomes than they actually are.

Removing realized gains from expanded AGI has the opposite effect of understating the concentration of realized gains among the highest incomes. Some taxpayers have large asset holdings that accrue gains in most years. In any one year, these taxpayers

sell a small fraction of their assets—for example, to weed out the least promising prospects or to allow consumption to exceed annual income. To entirely exclude realized gains would understate these taxpayers' incomes and, thereby, understate the share of capital gains going to the taxpayers with the highest incomes.

Whether including or excluding realized gains from AGI gives a more accurate measure of economic income cannot be determined from the annual data on tax returns, since the annual data do not reveal how often the same taxpayers realize gains in other years. If most gains are realized by the same taxpayers year after year, then leaving gains in income would be more accurate. However if most gains are realized by infrequent sales of many different taxpayers from year to year, then excluding gains from income would be more accurate.

Leaving gains in or removing them from expanded AGI has very little effect on the percentages of taxpayers in any income class. It does, however, have a large effect on the percentage of realized gains received by taxpayers at the highest incomes. Table 2 shows the 1985 distribution of realized gains first by expanded AGI and then by expanded AGI less realized gains. In Table 1, the distribution of realized gains by expanded AGI shows 57.6 percent of all gains going to taxpayers with expanded AGI of \$200,000 or more. When realized gains are removed from expanded AGI, the fraction of taxpayers with AGI of this level declines from 0.5 percent to 0.3 percent. But the fraction of capital gains realized at this income level declines to 31.7 percent.

Removing realized gains from expanded AGI increases the share of gains going to all other income classes, with the largest change being for the lowest income class. Removing gains from expanded AGI drops 0.3 percent of taxpayers into the lowest income class, but they are sufficient to raise the fraction of gains received in that class from 2.7 percent to 11.7 percent of all gains. Apparently, a small number of taxpayers with substantial gains had little other income.

Because concentration is overstated by expanded AGI and understated by expanded AGI less gains, the fraction of gains realized by those with the highest incomes in 1985 lies between 31.7 percent and 56.7 percent. Although this range is large, the entire range shows that realized gains are highly concentrated at the top of the income distribution. Whether gains are included or not, less than one-half of one percent of taxpayers had incomes of \$200,000 or more in 1985. Yet this small fraction of taxpayers realized at least 31.7 percent and as much as 57.6 percent of all capital gains.

<sup>&</sup>lt;sup>1</sup>For such taxpayers, accrued gains on their entire portfolio could be either below or above realized gains in any one year.

TABLE 2. The Distribution of Realized Capital Gains by Expanded AGI and Expanded AGI Less Gains, 1985

|                       | Taxpavers     |                  | Realized Capital Gains |                  |
|-----------------------|---------------|------------------|------------------------|------------------|
| Income Range          | With<br>Gains | Without<br>Gains | With<br>Gains          | Without<br>Gains |
| Income Range          | <u> </u>      | Gains            | Caus                   | Odub             |
| Less than \$ 10,000   | 27.8          | 28.1             | 2.7                    | 11.7             |
| \$ 10,000 - \$ 20,000 | 25.2          | <b>25.5</b>      | 1.7                    | 4.9              |
| \$ 20,000 - \$ 30,000 | 17.4          | 17.6             | 2.5                    | 6.3              |
| \$ 30,000 - \$ 40,000 | 12.1          | 12.1             | 3.2                    | 5.9              |
| \$ 40,000 - \$ 50,000 | 7.1           | 7.1              | 2.8                    | 5.2              |
| \$ 50,000 - \$ 75,000 | 6.7           | 6.6              | 7.7                    | 11.5             |
| \$ 75,000 - \$100,000 | 1.8           | 1.6              | 7.0                    | 7.7              |
| \$100,000 - \$200,000 | 13            | 1.3              | 14.8                   | 15.0             |
| \$200,000 or more     | 0.5           | 0.3              | 57.6                   | 31.7             |
| TOTAL                 | 100           | 100              | 100                    | 100              |

SOURCE: Congressional Budget Office tax simulation models.

#### Narrower Income Measures

Two other income measures have been used to deal with the irregular timing of capital gains realizations. One measure adjusts AGI only by removing capital gains; the other groups taxpayers by wages and salaries only. Both measures understate the minimum degree to which gains are concentrated at the top of the income distribution.

The distribution reported in *The Wall Street Journal* and referred to earlier in this paper groups taxpayers by AGI less gains. Using AGI instead of expanded AGI in 1985, however, understates the concentration of gains at the top of the income distribution because tax shelter losses are included in that AGI and tax-exempt income is not. When taxpayers are grouped by expanded AGI, excluding capital gains from income gives a lower bound to the concentration of gains at higher incomes. When only AGI is used and then capital gains are excluded, the resulting distribution understates the minimum percentage of capital gains received by the highest income class. Thus, when income is measured by expanded AGI less gain, as in Table 2, taxpayers with incomes of \$200,000 or more realize 31.7 percent of all gains. When income is measured with AGI less gains, the same income class realizes only 24.8 percent of all gains. Similarly, using AGI less gains rather than expanded AGI less gains overstates the maximum percentage of gains received by the lowest income class. Using expanded AGI less gains shows taxpayers with incomes below \$10,000 receiving 11.7 percent of the gains. Using unadjusted AGI less gains shows this class receiving 19.9 percent of the gains.

The second narrower measure of income uses only wage and salary income. When this measure is used, the irregular receipt of capital gains or tax shelter losses does not affect a taxpayer's relative income position. However, many high-income people receive little of their income from wages or salaries, and thus they appear to be relatively poor in distributions based on wages and salaries. Owners of small businesses and many doctors and lawyers receive their compensation primarily through proprietorship or partnership income. Also, retirees and some wealthy people live primarily off accumulated assets. Thus, while taxpayers with expanded AGI less gains of \$200,000 or more received 31.7 percent of all gains, those with wages and salaries in the same class received just 12.8 percent of all gains.

# Going Beyond Annual Data: Five-Year Average Income

Averaging a taxpayer's income over several years can correct the distortions to income caused by irregular receipt of capital gains income. Averaging reduces the influence of an exceptionally large gain in one year, as might occur when a farmer retires and sells the farm. But it still includes the regularly received gains that are a continuing component of income.

Computing average incomes requires tax return information on the same taxpayer in several successive years. Unfortunately, such "panel" data are compiled infrequently. The Treasury has published distributions by average AGI using its 1971-1975 panel of tax returns, but has not yet published similar distributions from its more recent 1979-1983 panel.

Distributions from the earlier panel indicate that leaving capital gains in income provides an upper bound on the concentration of gains at the top of the income distribution. Using the 1971-1975 panel, the Treasury contrasted the distribution of gains based on a single year's income, 1973, to one based on a five-year average. The distribution based on 1973 AGI found that 26.1 percent of gains realized in that year were claimed by tax returns with AGI in excess of \$100,000. However, when these capital gains were distributed by a five-year average AGI, only 18.5 percent of gains were claimed by tax returns with AGI in excess of \$100,000. The reduction in gains received by high-income taxpayers when average AGI is used reflects the distortion caused by the infrequent realization of large gains by some normally middle-income taxpayers. (the Treasury's distributions based on 1973 AGI and 1971-1975 average AGI are reproduced in Tables 3 and 4.)

An AGI of \$100,000 was relatively high in 1973. Taxpayers with AGI in excess of \$100,000 accounted for less than 3 percent of all AGI. Adjusted for inflation, \$100,000 in 1973 is equivalent to \$242,000 in 1985 and to \$290,000 in 1990. By 1990, CBO projects that 3 percent of AGI will be earned by taxpayers with incomes well in excess of \$1 million.

<sup>&</sup>lt;sup>2</sup>Office of the Secretary of the Treasury, Office of Tax Analysis, Report to Congress on the Capital Gains Tax Reductions of 1978 (September 1985), pp. 4-8.

TABLE 3. Percentage Distributions of Realized Capital Gains and Income by 1973 AGI Classes

| 1973 AGI Class          | 1973 AGI | 1973<br>Realized Gains |  |
|-------------------------|----------|------------------------|--|
| 27.57.66. 04.65         | 27.57101 |                        |  |
| \$ 5,000 or Less        | 4.5      | 2.7                    |  |
| \$ 5,000 - \$ 10,000    | 16.5     | 11.8                   |  |
| \$ 10,000 - \$ 15,000   | 25.8     | 10.4                   |  |
| \$ 15,000 - \$ 20,000   | 20.4     | 8.4                    |  |
| \$ 20,000 - \$ 30,000   | 17.8     | 12.8                   |  |
| \$ 30,000 - \$ 50,000   | 79       | 13.7                   |  |
| \$ 50,000 - \$ 100,000  | 4.6      | 14.1                   |  |
| \$100,000 - \$ 200,000  | 1.6      | 11.5                   |  |
| \$200,000 - \$ 500,000  | 0.6      | 7.1                    |  |
| \$500,000 - \$1,000,000 | 0.2      | 3.9                    |  |
| Over \$1,000,000        | 0.1      | 3.6                    |  |
| TOTAL                   | 100.0    | 100.0                  |  |

SOURCE: Tabulations from Office of the Secretary of the Treasury, Office of Tax Analysis, Report to Congress on the Capital Gains Tax Reductions of 1978 (September 1985), p. 6.

TABLE 4. Percentage Distributions of Realized Capital Gains and Average Income by 1971-1975 Average AGI Classes

| Average AGI Class       | 19<br>Average AGI Realize |       |
|-------------------------|---------------------------|-------|
| \$ 5,000 or Less        | 4.7                       | 4.6   |
| \$ 5,000 - \$ 10,000    | 18.1                      | 15.0  |
| \$ 10,000 - \$ 15,000   | 25.8                      | 7.9   |
| \$ 15,000 - \$ 20,000   | 21.0                      | 10.3  |
| \$ 20,000 - \$ 30,000   | 16.8                      | 19.3  |
| \$ 30,000 - \$ 50,000   | 73                        | 11.0  |
| \$ 50,000 - \$ 100,000  | 43                        | 13.3  |
| \$100,000 - \$ 200,000  | 1.4                       | 9.2   |
| \$200,000 - \$ 500,000  | 0.5                       | 6.0   |
| \$500,000 - \$1,000,000 | 0.1                       | 2.2   |
| Over \$1,000,000        | 0.1                       | 1.1   |
| TOTAL                   | 100.0                     | 100.0 |

SOURCE: Tabulations from Office of the Secretary of the Treasury, Office of Tax Analysis, Report to Congress on the Capital Gains Tax Reductions of 1978 (September 1985), p. 8.

The Treasury distributions do not compare average AGI with AGI less gains, so it is not clear whether including or excluding gains provides a closer approximation of the distribution based on average AGI. Nor do the Treasury distributions use expanded AGI. As a result, the degree of concentration may be somewhat understated in these Treasury distributions.

# Distributions of Capital Gains in 1990

Distributions of capital gains in 1990 are more relevant than those of 1985 for determining who would benefit from a capital gains reduction in that year. Income growth has moved many taxpayers into higher income classes and that increases the share of all income as well as the share of capital gains received by taxpayers with incomes in excess of a fixed amount such as \$200,000.

The Congressional Budget Office has projected AGI and expanded AGI from 1985 to 1990, using preliminary data from 1987 tax returns, aggregate changes in income by source, and CBO's economic forecast through 1990. The projected returns are used to show how the aforementioned factors affect the distribution of capital gains.

Table 5 presents the distributions shown in Table 2 at 1990 income levels, and shows the effects of income growth between 1985 and 1990. This growth increases the share of income received by those with expanded AGI of \$200,000 or more from 0.5 percent to 0.9 percent, while increasing the share of capital gains received by this income group from 57.6 percent to 60.6 percent. A similar pattern is observed when taxpayers are grouped by expanded AGI less capital gains. In this case, taxpayers with incomes of \$200,000 or more account for 0.8 percent of all taxpayers in 1990, as compared with 0.3 percent in 1985, while accounting for 38.3 percent of projected 1990 capital gains, as compared with 31.7 percent in 1985.

TABLE 5. The Distribution of Realized Capital Gains by Expanded AGI and Expanded AGI Less Gains, Projected for 1990

|                       | Taxpavers     |                  | Realized Capital Gains |                  |
|-----------------------|---------------|------------------|------------------------|------------------|
|                       | With<br>Gains | Without<br>Gains | With<br>Gains          | Without<br>Gains |
| Income Range          |               |                  |                        |                  |
| Less than \$ 10,000   | 23.9          | 24.2             | 2.9                    | 12.5             |
| \$ 10,000 - \$ 20,000 | 21.2          | 21.3             | 1.2                    | 3.4              |
| \$ 20,000 - \$ 30,000 | 16.7          | 16.8             | 1.7                    | 4.2              |
| \$ 30,000 - \$ 40,000 | 11.8          | 11.8             | 2.2                    | 4.8              |
| \$ 40,000 - \$ 50,000 | 8.7           | 8.7              | 26                     | 4.6              |
| \$ 50,000 - \$ 75,000 | 11.0          | 11.0             | 6.1                    | 10.4             |
| \$ 75,000 - \$100,000 | 3.4           | 3.3              | 6.1                    | 7.4              |
| \$100,000 - \$200,000 | 2.3           | 2.0              | 16.5                   | 14.4             |
| \$200,000 or more     | 0.9           | 0.8              | 60.6                   | 38.3             |
| TOTAL                 | 100           | 100              | 100                    | 100              |

SOURCE: Congressional Budget Office tax simulation models.

The Tax Reform Act of 1986 has broadened the definition of AGI. For example, it has eliminated the capital gains exclusion and curtailed deductions of tax shelter losses and IRA contributions. As a result, distributions of capital gains based on 1990 AGI are very similar to those based on expanded AGI. When income is defined as 1990 AGI, the top income class is projected to receive 59.7 percent of gains as compared to 60.6 percent when capital gains are distributed by expanded AGI as in Table 5. Therefore, a separate table showing the distribution of realized capital gains by AGI rather than expanded AGI is not shown for 1990.

# From Realized Capital Gains to Benefits

The distribution of realized gains provides only a first approximation to the distribution of benefits from a capital gains tax reduction. The ultimate distribution of benefits also depends on the specific change in tax rates and on the response of taxpayers to the change. Benefits under a fixed percentage exclusion and under indexation are examined here.

Exclusion. A percentage exclusion reduces the tax rate on capital gains in proportion to the tax rate already being paid. Those paying a higher tax rate receive a greater tax reduction and a greater benefit per dollar of gain realized. A 30 percent exclusion, for example, reduces the tax rate on capital gains that would have been taxed at 28 percent by 8.4 percentage points, while lowering the tax rate on gains taxed at 15 percent by 4.5 percentage points. Thus, for each \$100 of gains realized, a taxpayer in the 28 percent bracket saves \$8.40 in taxes, while a taxpayer in the 15 percent bracket saves \$4.50.

Under current law, the 28 percent tax bracket applies to most capital gains, while the 15 percent bracket applies to the small amount of gains received primarily by those taxpayers with expanded AGI below about \$40,000. Because an exclusion provides a larger tax reduction for the higher tax bracket, the distribution of benefits would show even smaller shares for the low-income groups than does the distribution of realized gains. However, among the wide income range paying the 28 percent tax rate, the distribution of benefits would approximately mirror the distribution of gains. (That portion of taxpayers paying the 33 percent rate on gains would receive somewhat greater benefits per dollar of gain than those in the 28 percent bracket.)

The distribution of benefits also depends on how taxpayers respond to a rate reduction. Lowering the tax rate on capital gains reduces the cost of selling assets with capital gains. Some empirical studies suggest that high-income taxpayers are apt to sell proportionately more assets in response to such a reduction than are other taxpayers. This finding suggests that the reduction in the cost of realizing gains resulting from a capital gains exclusion is worth relatively more to higher income taxpayers. Thus, the actual distribution of benefits from an exclusion may be more concentrated among high-income taxpayers than is the distribution of realized gains.

Indexation. Instead of a uniform percentage exclusion, taxes on capital gains could be reduced by removing the inflationary component of a gain from taxation. This indexation is like an exclusion where the amount excluded is the inflationary part rather than a fixed proportion. Evidence from special compilations of Tax Schedule D, the schedule used to report capital gains, indicates that inflation tends to be a smaller share of gain for high-income taxpayers than for others.<sup>3</sup> Thus, indexation would be like an exclusion that was smallest for the highest-income taxpayers. This effect tilts the distribution of benefits from indexation more toward middle- and lower-income taxpayers than would a uniform percentage exclusion. Although the benefits of indexing would be less concentrated among taxpayers with high incomes than would the benefits from a uniform exclusion, high-income taxpayers would still benefit relatively more than other taxpayers because of the much greater proportion of gains realized by high-income taxpayers.

# Measuring the Distribution of Benefits from the Distribution of Wealth

The analysis above has examined issues that arise when using the distributions of realized gains to infer the distribution of benefits from a cut in the capital gains tax. A related source of information is the distribution of asset ownership.

The most reliable recently published data on asset ownership is a 1983 survey of families conducted for the Board of Governors of the Federal Reserve System. Table 6 presents survey information showing distributions of assets with potentially taxable capital gains. The distributions shown in Table 6 are not directly comparable with the distributions presented above because of differences between survey and tax return data. For example, what survey participants report as family income will not necessarily match income reported on tax returns, and the survey definition of a family differs from that of a tax filing unit.

In spite of these differences, survey data on the distribution of asset ownership are useful supplements to data on the distribution of realized capital gains. First, all assets with taxable capital gains benefit from a reduction in capital gains taxes even if such assets are not immediately sold because any future capital gains can potentially be realized at a lower tax rate. In addition, lower taxes on capital gains will increase the price that investors are willing to pay for investments that pay off in the form of capital gains.

<sup>&</sup>lt;sup>3</sup>The information necessary to calculate the inflationary component of realized capital gains has only been collected for special samples of tax returns filed in selected years. Tabulations by the Treasury Department, the Joint Committee on Taxation, and others have been made for the 1971-75 years, as well as 1977, 1981, and 1985. These tabulations all find that the inflationary component of capital gains is smaller at higher incomes. In fact, for the 1971-1975 years and for 1981, the average inflationary gain on corporate stock for taxpayers with incomes below \$100,000 was larger than the nominal gain. These taxpayers on average suffered real capital losses.

As shown in Table 6, ownership of those assets likely to be subject to capital gains taxes is concentrated among the highest income classes. Of the assets held by families, the 0.5 percent of families in the top income class owned 43 percent of publicly traded stock, between 18 and 31 percent of businesses not publicly traded, and 27 percent of property other than owned homes. These amounts are close to or exceed the shares owned by the 90 percent of households with the lowest incomes.

TABLE 6. DISTRIBUTION OF OWNERSHIP FOR MAJOR ASSETS SUBJECT TO CAPITAL GAINS TAXES IN 1983 (In percent)

|                      | Distribution of Families | Property<br>(Excluding | Business |         | Publicly<br>Traded |
|----------------------|--------------------------|------------------------|----------|---------|--------------------|
|                      |                          | Home)                  | Investor | Manager | Stock              |
| Under \$50,000       | 90.0                     | 37                     | 24       | 22      | 15                 |
| \$50,000 - \$280,000 | 9.5                      | 36                     | 45       | 60      | 42                 |
| Over \$280,000       | 0.5                      | 27                     | 31       | 18      | 43                 |

SOURCE: "Financial Characteristics of High-Income Families," Federal Reserve Bulletin (March 1986), p. 171

NOTE: Income is total family income for 1982 as reported in the survey. Adjusted for inflation, \$50,000 in 1982 is equivalent to \$65,200 in 1990, and \$280,000 in 1982 is equivalent to \$365,100 in 1990.

The concentration of asset ownership at the top of the income distribution indicates that the benefits from a capital gains tax cut will be concentrated on those with the highest income. This conclusion reinforces the conclusion from the distributions of realized gains among taxpayers reported above.

#### Conclusions

Without complete information on taxpayers' economic incomes, distributional analyses of the effects of changes in the tax treatment of capital gains largely rely on measures of income that can be obtained from tax return data. One conclusion from these data is clear. The receipt of capital gains is concentrated among taxpayers with the highest incomes. The nearly one percent of taxpayers who are projected to have incomes of \$200,000 or more in 1990 can be expected to account for between 38.3 percent and 60.6 percent of all realized capital gains.

This conclusion from tax return data is reinforced by evidence on the ownership of the main assets subject to capital gains taxation. The ownership of corporate stocks, privately held businesses, and investment property is concentrated among the highest-income families.