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Edited by **Lawrence H. Summers**

Capital Gains Taxes and Investment

Capital Income Taxation and Recent Tax Reforms

**Taxation, Corporate Capital Structure,
and Financial Distress**

Demographics, Fiscal Policy, and U.S. Savings

U.S. Withholding Taxes on Foreign Interest Income

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INTRODUCTION

Lawrence H. Summers

Harvard University and NBER

While the 1986 Tax Reform Act was as sweeping as any in the history of the American income tax, it did not put an end to discussions of tax reform. The combined pressure of continuing budget deficits and increasing concern about the ability of the United States to compete in an increasingly open world economy has led to continuing discussion of further tax reforms. Tax policy debates continue to occupy the attention of public officials, the business community, tax attorneys, and the general public. Capital gains tax reform was one of the most contentious issues considered by the Congress in 1989, and is likely to be debated further in the near future.

Economic research can make an important contribution to tax policy debates by providing quantitative information on both the distribution of the burdens associated with various tax changes, and on the likely effects of various proposals on economic efficiency. Tax changes are often credited or blamed for a host of changes in the American economy ranging from increases in corporate leverage to declines in personal saving. Economic research makes an important indirect contribution to tax policy when it evaluates the veracity of these claims.

This volume, like its three predecessors, collects a number of economic studies of issues of immediate relevance to ongoing studies of tax reform. Each of the studies is at the forefront of modern work in public economics. But the conclusions are presented in a way that is intended to be accessible to non-economists who are concerned with the development of tax policy. In the remainder of this introduction, I shall summarize the five papers included in the present volume.

Daniel Feenberg's and my paper, "Who Benefits from Capital Gains Tax Reductions?" examines the distribution of capital gains benefits along several dimensions. Examining the distribution of benefits across income classes, we find that, contrary to some recent claims, the lion's

share of the benefits of any capital gains reductions go to high income taxpayers. By a variety of measures, the richest 2 percent of Americans receive more than 50 percent of all capital gains. Capital gains on corporate stocks are even more concentrated among high income taxpayers. Because moderate income taxpayers typically hold their assets longer, and enjoy smaller capital gains than their higher income counterparts, it turns out that indexing the basis of capital assets is considerably more progressive than reducing capital gains tax rates.

Because some assets such as new equipment may yield more external benefits than others and because the current tax system probably favors some types of investments, it is of interest to know what types of assets would benefit from a capital gains tax reduction. Feenberg and I find for a variety of capital gains tax reduction options that less than half of the benefits go to corporate assets, and that in most cases real estate is the principal beneficiary of capital gains tax reductions. This bias is especially strong in the case of indexation proposals. We also find that most capital gains are realized on assets that have been held for 10 or more years. This implies that over a five year period, close to 80 percent of the benefits of capital gains tax reductions are likely to accrue to assets that were already in place when the tax cut was enacted. Since relatively few short-term capital gains are realized, it is unlikely that graduating tax rates by holding period for taxable investors would have much impact on the turnover of financial assets.

The paper "Treatment of Capital Income in Recent Tax Reforms and the Cost of Capital in Industrialized Countries" by Eytan Sheshinski contrasts the 1986 U.S. Tax Reform Act with recent reforms in other countries. While top marginal tax rates have fallen sharply and the tax base has been broadened almost everywhere, Sheshinski finds no similar uniformity in the treatment of capital income. The United States is alone in having embraced the concept of uniformity in the taxation of capital income. In most other countries, interest, capital gains, and to a lesser extent dividends continue to be heavily tax favored. Traditionally, other countries have been less generous than the United States in permitting individuals to deduct interest in computing their taxes, but the gap has narrowed with the U.S. decision to phase out consumer interest deductions.

Mark Gertler and R. Glenn Hubbard's paper "Taxation, Corporate Capital Structure, and Financial Distress" offers some reflections on the role of taxation in corporate leverage decisions. During the 1980s, corporate leverage has increased sharply. In the last year or so, a number of highly leveraged firms have encountered severe financial distress, lead-

ing some observers to worry that current tax rules endanger financial stability. Gertler and Hubbard review recent developments in economic theory which highlight the potential benefits and costs of debt finance. They argue that firms would choose optimal capital structures, trading off the benefits and costs of debt finance, if there were no tax bias in favor of debt. They then argue that present tax rules induce firms to accept more risk of cyclical distress and so endanger financial stability. Gertler and Hubbard conclude their paper by suggesting a number of reforms that have the potential to reduce the tax bias in favor of debt finance.

Alan Auerbach and Laurence Kotlikoff's paper "Demographics, Fiscal Policy, and U.S. Saving in the 1980s and Beyond" explores the implications of demographic changes for U.S. saving behavior. Given the large changes in the age structure of the U.S. population that are likely over the next 40 years, this topic is of considerable importance for budget policy generally and Social Security policy in particular. Auerbach and Kotlikoff use data on the savings of persons in different age groups in an effort to forecast the likely effects of demographic change on the American saving rate. They find that for about the next 30 years, demographic factors are likely to push the American saving rate upward. They suggest that this may lead the U.S. current account to move into surplus by the year 2000.

Auerbach and Kotlikoff observe that demographic factors cannot account for the decline in personal and private saving during the 1980s. They therefore examine a number of other factors, including the strong stock market, increased consumer borrowing, and reductions in the precautionary demand for saving. In the end, however, they are unable to fully resolve the question of why saving declined in the 1980s. They suggest that the decline in saving during the 1970s reflects non-demographic factors and so does not call into question their conclusion that demographic factors will push the American saving rate upward in the years to come.

Lawrence Goulder's paper "Implications of Introducing U.S. Withholding Taxes on Foreigners' Interest Income" addresses an issue that has attracted increasing attention as the magnitude of foreign investment in the U.S. has increased during the 1980s. Using a computable general equilibrium model of the U.S. as an open economy that he developed in an earlier work, Goulder concludes that the introduction of a statutory 30 percent U.S. withholding tax on foreigners' interest income would make Americans better off if foreign governments do not retaliate. He also finds that it would reduce the American trade balance

in the short run, but would exacerbate it in the long run. On the other hand, he finds that if foreigners retaliated, the introduction of a withholding tax on interest income paid to foreigners would make Americans worse off. In addition to those efficiency arguments, Goulder also considers a number of equity arguments made for and against proposals to introduce a withholding tax.

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I am grateful to Deborah Mankiw who has assisted in every stage of this project with good cheer and great skill. Kirsten Foss and Ilana Hardesty handled with their usual efficiency all the logistics for the conference at which these papers were presented. Martin Feldstein provided the original inspiration for the series of which this volume is a part. Finally, I am grateful to the authors of the papers included here for their hard work and skillful analysis.

Lawrence H. Summers

CONTENTS

Introduction: *Lawrence H. Summers* vii

Acknowledgments xi

WHO BENEFITS FROM CAPITAL GAINS TAX REDUCTIONS? 1

Daniel Feenberg, NBER

Lawrence Summers, Harvard University and NBER

**TREATMENT OF CAPITAL INCOME IN RECENT TAX REFORMS
AND THE COST OF CAPITAL IN INDUSTRIALIZED
COUNTRIES 25**

Eytan Sheshinski, Hebrew University and Columbia University

**TAXATION, CORPORATE CAPITAL STRUCTURE, AND
FINANCIAL DISTRESS 43**

Mark Gertler, University of Wisconsin and NBER

R. Glenn Hubbard, Columbia University and NBER

**DEMOGRAPHICS, FISCAL POLICY, AND U.S. SAVING IN THE
1980s AND BEYOND 73**

Alan J. Auerbach, University of Pennsylvania and NBER

Laurence J. Kotlikoff, Boston University and NBER

**IMPLICATIONS OF INTRODUCING U.S. WITHHOLDING TAXES
ON FOREIGNERS' INTEREST INCOME 103**

Lawrence H. Goulder, Stanford University and NBER

WHO BENEFITS FROM CAPITAL GAINS TAX REDUCTIONS?

Daniel Feenberg

NBER

Lawrence Summers

Harvard University and NBER

EXECUTIVE SUMMARY

This paper examines the distribution of the benefits associated with reductions in capital gains taxes. Plans which reduce capital gains taxes by excluding a fixed fraction of capital gains from taxable income, by taxing real rather than nominal gains, and by using a sliding scale capital gains exclusion are considered. We reach three main conclusions.

1. Using plausible measures of economic status, capital gains receipts are highly concentrated among those with high incomes. The richest 2 percent of Americans receive more than 50 percent of all capital gains. Claims that capital gains recipients only appear to be rich because their capital gains income is transitory are not supported by longitudinal data. Likewise, claims that a large fraction of the benefits from capital gains tax reductions flow to middle income taxpayers result from failing to consider tax shelters. Capital gains on corporate stocks are considerably more concentrated among high income individuals than capital gains on other assets.

2. There are important differences in the distributional consequences of different approaches to reducing capital gains taxes. Indexation yields greater benefits to lower income taxpayers than a general capital gains exclusion because they typically hold assets longer before selling them, and because they typically enjoy smaller gains than higher income taxpayers. Indexation also favors real estate over corporate stocks to a much greater extent than does a general exclusion. A sliding scale capital gains tax cut, based on the amount of time an asset is held has distributional consequences very similar to a general exclusion.
3. Most capital gains are realized on assets that were held for 10 or more years. Reductions in capital gains taxes would, for many years, benefit primarily assets that are already in place. Confining capital gains relief to future gains would substantially reduce the revenue cost of capital gains reform.

Proposals to reduce taxes on capital gains remain controversial. Disagreements stem from three sources. First, different observers with different values assess even agreed-on outcomes differently. Some regard increasing economic growth as of paramount importance, while others place more emphasis on distributional effects. Second, there are differences of opinion about the likely response of economic behavior to changes in capital gains tax rates. Proponents believe that capital gains cuts will have major effects on investment incentives and economic efficiency while opponents are skeptical of the importance of these effects and stress certain perverse incentives created by capital gains reductions. Third, there are different views about who will be the direct beneficiaries of capital gains cuts. Views differ about whether capital gains tax reductions primarily benefit high or middle income taxpayers, investors in new business or in tax shelters, and future investors or those who have invested in the past.

Disagreements over values are inherently unreconcilable. Disputes about the incentive and revenue effects of various tax reforms are potentially reconcilable, though considerable controversy remains. The question of who benefits from capital gains tax cuts is directly answerable with available longitudinal data on the returns of individual taxpayers. This paper uses these data to examine the distribution of the benefits from four different capital gains reform proposals: an across the board tax cut on long-term assets similar to the one proposed by the Bush administration; indexation of the basis on capital assets; a sliding scale capital gains tax rate that declines with the length of time for which an asset is held; and an alternative like the one considered by the Senate in

the fall of 1989 that offered taxpayers a choice between indexing gains and length-of-time-based exclusion. We focus on three aspects of the distribution of the benefits from capital gains tax cuts.

First, *will the benefits of capital gains tax cuts flow primarily to very wealthy taxpayers or will they be relatively evenly distributed?* Income in a single year inclusive of capital gains may be a very poor indicator of a household's economic status. We therefore explore the distribution of capital gains tax liabilities by a variety of measures of economic well being, including average income over a four-year period, an estimate of taxable wealth, and for those who have not yet retired, wage and salary income. *Regardless of what measure of economic status we use, we find that the majority of capital gains tax preferences go to those in the top 0.5 to 2 percent of the income distribution.* Analyses suggesting otherwise are flawed by elementary errors such as using current wage and salary income to measure the economic position of those who have retired, or failing to take full account of preference income in assessing taxpayers' affluence.

While any reduction in capital gains tax burdens primarily benefits high income households, there are important differences in the distributional consequences of different plans. Because very high income taxpayers have typically earned larger capital gains, relative to the price at which they bought their assets, they gain less from indexing schemes which raise the basis on the sale of assets than do taxpayers who are less well off. For example, we estimate that 43 percent of an across the board exclusion for capital gains would go to the taxpayers with less than \$100,000 in AGI whereas 62 percent of the benefits of indexing capital gains would go to the same group. The distributional consequences of the pure sliding scale plan are quite similar to those of an across the board capital gains exclusion.

Second, *which types of investment will benefit from capital gains tax reform?* Many observers concerned with the competitiveness of American industry regard spurring investment in new equipment or technology as a higher priority than spurring investment in real estate or short-term financial instruments. Others are concerned with the distribution of benefits across different types of assets because they believe that the tax code already discriminates against certain classes of investment and believe that redress is appropriate. For the four capital gains reform proposals we consider, we estimate the fraction of relief going to different asset categories.

Our results suggest that, in general, *less than half of the benefits of capital gains tax cuts go to owners of corporate stock.* Only a small fraction of the benefits go to venture capital or small businesses. Nearly half of the reported capital gains involve real estate. There are some interesting

differences between the effects of different capital gains cut reductions. For example, 27 percent of the benefit of inflation indexing goes to owners of corporate stock and 56 percent to owners of land and real estate. On the other hand, an across the board capital gains exclusion favors stockholders (42 percent of the benefit) at the expense of real estate investors (35 percent). The other plans we consider have intermediate effects.

Third, *to what extent will capital gains tax cuts benefit capital that is already in place?* For each of our four plans, we estimate the fraction of the benefits conferred in the five years following reform that will go to investments that had already been made at the time a plan was put into effect. We find that for each of the plans considered *between 75 and 80 percent of first five years' tax relief will be a windfall to assets that are already in place*. The windfall fraction is greater for the exclusion plans and less for indexing. If, as proponents suggest, capital gains tax reductions would spur realizations, the fraction of windfall gains would be even higher. These results imply that very substantial reductions in the budgetary cost of capital gains tax reductions could be achieved by making them prospective.

The remainder of the paper is organized as follows. Section I considers the effects of capital gains tax cuts on the distribution of income. Section II examines their effects on different assets. Section III considers the distribution of benefits between past and future investments. Section IV examines how taking account of incentive effects might modify the conclusions of the earlier analysis and offers some concluding observations.

I. CAPITAL GAINS TAX CUTS AND THE DISTRIBUTION OF INCOME

This section examines the effects of capital gains tax reforms on taxpayers with differing incomes. As a number of analysts have pointed out, there are reasons for doubting that simple tabulations of who pays capital gains tax payments by income class say very much about the economic well-being of those who benefit from capital gains relief. First, when individuals sell assets on which they have large accrued gains, their single year income overstates the standard of living that they can sustain. Second, for taxpayers who successfully shelter income, adjusted gross income may understate true standards of living. The same is true of efforts to use wage and salary income to proxy economic well-being when retired people are included in the sample. In order to ad-

TABLE 1
Distribution of Capital Gains Realization by AGI

Percentile rank	AGI breakpoint	Cumulative percent of AGI	Cumulative percent of gains*
.5	203.0	8.0	54.0
1.0	145.0	11.0	61.0
2.0	106.0	15.0	68.0
5.0	75.6	24.0	75.0
10.0	59.0	35.0	80.0
20.0	44.1	50.0	84.0
50.0	20.8	85.0	91.0
100.0		100.0	100.0

Source: 1986 Tax Model and authors' calculations. Dollar amounts in thousands of 1989 dollars.

* Schedule D and non-schedule D net gains before capital gains deduction. Losses limited to \$3,000.

dress these issues, we examine the distribution of realized capital gains by a number of different measures of economic status.

Table 1 presents the distribution of capital gains income by taxpayers' adjusted gross income. The data are drawn from NBER 1986 Individual Income Tax Model. They reveal that capital gains are much more concentrated than most other forms of income. Persons in the top 0.5 percent of the income distribution receive 54 percent of all capital gains compared with 8 percent of total income. It appears that the top 2 percent of the population receives almost eight times as much capital gains income as the bottom 50 percent of the population. If adjusted gross income is accepted as a satisfactory measure of real affluence, it is hard to escape the conclusion that the proximate benefits of capital gains tax reductions are rich taxpayers.

It is often argued that statistics like those in Table 1 are very misleading because a sizable fraction of capital gains go to people of modest means who sell their home or their business and have their income artificially inflated for a single year. In order to examine this issue, Table 2 makes use of the most recently available panel data on individual tax returns. The data cover the period from 1979 to 1984. Besides the differences in time period, the panel data are not comparable to the information in Table 1 because the panel sample contains relatively few high income taxpayers.¹ Nonetheless, the panel information can be used to

¹ The standard tax file is a stratified random sample with weights attached to each return. The panel sample is a purely random sample of tax returns.

TABLE 2
Distribution of Capital Gains Realizations by Average and Annual Income

Percentile rank	<i>Annual AGI</i>		<i>Average AGI*</i>	
	<i>With net capital gains</i>		<i>With net capital gains</i>	
	Income breakpoint	Cumulative net gain	Income breakpoint	Cumulative gains
.5	217.0	42.2	211.0	36.1
1.0	152.0	50.3	144.0	42.3
2.0	115.0	56.5	110.0	49.4
5.0	82.5	66.7	80.7	59.2
10.0	65.7	72.4	63.8	65.9
20.0	50.5	78.7	49.6	74.4
50.0	37.5	89.1	26.6	87.7
100.0		100.0		100.0

* Source: 1979–1984 Panel File and authors' calculations. All dollar amounts in 1989 dollars. Sample is pooled 1979–1984 tax returns for taxpayers with four or more returns represented.

get an indication of the importance of the distortion caused by looking at only a single year's income.

The results in Table 2 on the distribution of capital gains income by total AGI inclusive of capital gains suggest that reliance on a single year's income in assessing the distributional impact of capital gains changes does not greatly distort the picture. For the panel sample, the data suggest that when income in a single year is studied, 50 percent of capital gains go to the top 1 percent of income recipients, whereas when average income is used, 43 percent of capital gains go to the top 1 percent of income recipients. Similarly, using four-year average data reduces the share of capital gains going to the top 5 percent of capital gains recipients from 67 to 59 percent. To put these figures in perspective, note that the share of all income going to the top 1 percent of the population on an annual basis is 9 percent but falls to 8 percent on a four-year average basis. This suggests that capital gains income is not more transitory than most other components of income.

This inference is supported by the recent analysis of capital gains recipients by Slemrod et al. They report that half of the capital gains in the years 1981–1984 are realized by taxpayers with gains reported in each of the four years, and that only 6–13 percent of the gains (depending on the year selected) are reported by taxpayers realizing capital gains in only one of the four years. While they find that using average income over a several-year period considerably reduces the share of capital

gains received by the \$200,000 and over income category, this is in a sense a statistical artifact. It occurs primarily because taking average income over a four-year period reduces the fraction of taxpayers in the \$200,000 and above category.

An alternative way of examining the distribution of the benefits from capital gains tax cuts, is to look at the distribution of capital gains by income categories that exclude capital gains. Two approaches are suggested in this regard. Sometimes, the distribution of capital gains by income class exclusive of capital gains is examined. Alternatively, it is suggested that wage and salary income is a preferable proxy for true economic income. Both of these approaches are problematic since there is no reason why capital gains are not as much income as interest receipts or dividend payments. Furthermore, as we have just demonstrated, most capital gains do not represent transitory income. However, because statistics on the non-capital gains income of capital gains recipients are often used to support the claim that a substantial fraction of capital gains relief beneficiaries would be middle class, it is worth examining further the economic position of capital gains beneficiaries.

The first column of Table 3 reports the distribution of capital gains beneficiaries by non-capital gains income. When capital gains income is excluded, the distribution of capital gains appears to be much more egalitarian. The top 0.5 percent of recipients of non-capital gains income receive only 24 percent of all capital gains. Furthermore, the share of capital gains going to the half of the population with lower incomes rises to 11 percent when capital gains income is included in income, and to 30 percent when it is excluded. Statistics of this type have been used by the Wall Street Journal's editors and others to illustrate that the middle class is an important potential beneficiary of cuts in capital gains taxes.

Before accepting this conclusion, it is worthwhile to consider other characteristics of "low or moderate income" taxpayers who receive substantial capital gains income. Toward this end, the second column of Table 3 looks at the distribution of capital gains by income where income is expanded to include only positive items. This excludes tax shelter losses. It turns out to have a major impact on the distributional consequences of reductions in capital gains taxes. The share of capital gains received by the 0.5 percent of the population rises from 24 to 41 percent, and the share received by the lower half falls from 30 to 11 percent.

The striking differences between the tabulations which include and exclude loss items in measuring income suggest that there may be large differences between middle income families with and without capital gains receipts. Table 4 compares this group to other taxpayers with