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Inflation and the Excess Taxation of Capital Gains on Corporate Stock

With Joel Slemrod

Inflation distorts all aspects of the taxation of personal income but is particularly harsh on the taxation of capital gains. When corporate stock or any other asset is sold, current law requires that a capital gains tax be paid on the entire difference between the selling price and the original cost even though much of that nominal gain only offsets a general rise in the prices of consumer goods and services. Taxing *nominal* gains in this way very substantially increases the effective tax rate on *real* price-adjusted capital gains. Indeed, many individuals pay a substantial capital gains tax even though, when adjustment is made for the change in the price level, they actually receive less from their sale than they had originally paid.

The present study shows that in 1973 individuals paid nearly \$500 million of extra tax on corporate stock capital gains because of the distorting effect of inflation. The detailed evidence presented below shows that this distortion is greatest for middle income sellers of corporate stocks.

More specifically, in 1973 individuals paid capital gains tax on more than \$4.5 billion of nominal capital gains on corporate stock. If the costs of these shares are adjusted for the increases in the consumer price level since they were purchased, the \$4.5 billion nominal gain becomes a real capital loss of nearly \$1 billion. As a result of this incorrect measurement of capital gains, individuals with similar real capital gains were subject to very different total tax liabilities.

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These findings are based on a new body of official tax return data on individual sales of corporate stock. The first section of the paper describes the data and the method of analysis. The basic results are presented in section 7.2 Section 7.3 analyzes the extent to which equal real gains are taxed unequally under current rules. Several alternatives to the current law are then examined in detail. A final section examines how a permanent inflation rate of 6 percent would quadruple the effective rate of tax on capital gains.¹

7.1 The Data and Estimation Method

Each year the Treasury Department and the Internal Revenue Service select a large scientific sample of tax returns with which to study various aspects of income sources and tax liabilities. In order to provide adequate information on high income taxpayers, the sample contains a much larger fraction of high income returns than of low and middle income returns. Since the sampling rates are known, the sample can be used to construct accurate estimates for the entire population.

In 1973, the information collected for the annual sample of tax returns was extended in a special study to include detailed data on capital asset transactions. The complete record on each sale of a capital asset (as recorded in Schedule D of Form 1040) was combined with the other information from that taxpayer's return. In the current study, we consider only the sales of corporate stock. Our sample consists of information for 30,063 individuals and 234,974 individual corporate stock sales in 1973.²

We supplemented the record for each transaction by calculating a price-indexed capital gain. More specifically, we multiplied the acquisition price of the stock by the ratio calculated by dividing the consumer price index (CPI) for 1973 by the CPI for the year of purchase. This has the effect of restating the cost of the stock in 1973 dollars. Subtracting this price-indexed cost from the amount for which the stock was sold in 1973 yields a correct real capital gain in 1973 dollars. Since the CPI was higher in 1973 than in any previous year, the real capital gain is less than

1. For previous discussions of the taxation of capital gains in an inflationary economy see Brinner (1973, 1976) and Diamond (1975). The theory of the effect of income taxation in an inflationary economy, including the tax treatment of interest and capital gains, is developed in Feldstein, Green, and Sheshinski (1978; see chap. 4 above).

2. In a relatively small number of transactions, there is a discrepancy between the reported gain or loss and the difference between the reported purchase and sale prices. These nonmatching transactions were dropped from our sample, reducing the total capital gain on corporate stock from \$5.01 billion to \$4.63 billion. Our sample also excludes transactions in which the taxpayer did not specify the asset type and transactions recorded on partnership and fiduciary returns. Our estimate of the excess tax paid because of inflation is therefore an underestimate of the true value.

the nominal gain for all regular sales and greater than the nominal gain for all short sales.

Of the \$4.63 billion in nominal capital gains, transactions representing \$1.79 billion do not have a correctly coded year of purchase, presumably because the taxpayer failed to provide this information on his tax return. In order to calculate the price-adjusted cost of these stocks, we estimated the year of purchase by using the adjusted gross income (AGI) of the taxpayer and the ratio of the selling price to the original cost of the transaction. More specifically, all of the transactions for which we have correctly coded years of purchase were classified into one of eight AGI groups and one of 25 classes of the ratio of selling price to original cost. For each of these 200 categories, the average holding period was calculated. This average holding period was then applied to each of the transactions that had no purchase data on the basis of the taxpayer's AGI and the transaction's ratio of sale price to purchase price. When the holding period predicted in this way involved a fraction of a year, the price index was interpolated between the two bordering years' indices.³

To assess the excess tax that resulted from the mismeasuring of the capital gains, we must calculate the tax liability that individuals incurred in 1973 on their nominal capital gain and the liability that they would have incurred if the real capital gain had been included instead. To do this we use a special computer program that incorporates the relevant features of the income tax law as of 1973 and that calculates each individual's total tax liability for different measures of the capital gain.⁴ Comparing the total tax liability based on the *nominal* capital gain (or loss) as recorded for 1973 with the liability if there were *no* gain (or loss) on corporate stocks provides the value for each individual of the actual capital gains tax on nominal gains. Similarly, comparing the total tax liability with the *real* capital gain for 1973 as described above with the liability if there were no gain provides the value for each individual of the capital gains tax on real gains. These tax calculations distinguish short-term and long-term capital gains in the usual way.

All calculations are done using the provision of the law of 1973 that limited the loss to be charged against current income to \$1,000. Because using a real capital gains measure makes capital losses much more com-

3. Although there is no reason to believe that our procedure introduces any bias in the calculation of the excess tax, there is no way to test this directly. As a partial test of our method, the real gains of the transactions with known purchase dates were calculated using the predicted holding period rather than the actual. The resulting distribution of real gains is very similar to the actual real gains. To the extent that the transactions with purchase year missing are similar to those with a correctly coded date, our procedure will accurately approximate the real gain.

4. The program includes such features as the alternative tax, the preference tax, and the limit on tax losses as well as full information on each individual's income, deductions, etc. This TAXSIM program is described and used in Feldstein and Frisch (1977).

mon than they now appear to be, we also show the effect of removing the loss limitation. Several other changes in the tax law were also studied and will be described below.⁵

7.2 The Excess Tax on Capital Gains

The current practice of taxing nominal capital gains resulted in a tax liability of \$1,138 million on the sales of corporate stock in 1973.⁶ If capital gains were measured instead in real terms, the tax liability would only have been \$661 million.⁷ The excess tax was thus \$477 million, an increase of more than 70 percent. If the current limit on deducting capital losses were also eliminated, the tax on real capital gains would only have been \$117 million.

Table 7.1 shows the detailed calculations by income class that underlie these total figures. The first row presents the net capital gain as defined by the current law. For each of the eight adjusted gross income (AGI) classes, the net capital gain figure is the weighted sum of all of the individual net capital gains of taxpayers in the AGI class; the weights reflect the sampling probabilities, making our total figure a valid estimate of the total net capital gain for all taxpayers in that class.⁸ Note that the current law's nominal measure of the capital gains implies that there is a positive net gain in each income class. The sum of these gains is \$4.63 billion.

Row 2 presents the corresponding *real* net capital gains. This adjustment for the rise in the price level changes the \$4.63 billion nominal gain into a \$910 million real loss. Although adjusting for the price change reduces the gain at every income level, the effect of the price level correction is far from uniform. For taxpayers with AGI's below \$100,000, the price adjustment indicates that real capital gains were negative. This group had \$1.27 billion of nominal capital gains but, after adjusting for the rise in consumer prices, had a real capital loss of \$3.31 billion. In

5. Because of the new Treasury data, our method represents a substantial improvement over the estimation procedure used by Brinner (1976). He worked with published data on capital gains in 1962 and did not have adequate measures of individual marginal tax rates on capital gains. Moreover, 1962 came after a period of relative price stability; the CPI rose at an average annual rate of less than 1.3 percent during the previous decade. Brinner was, of course, careful to warn his readers of these limitations.

6. Recall that our sample excludes sales in partnership and trusts and omits a small fraction of sales in which the reported gain or loss did not correspond exactly to the difference between selling price and original basis.

7. This calculation and all other calculations used here are based on the actual stock sales in 1973. Changing the law to tax only real capital gains would, of course, increase the amount of stock that is sold. On the sensitivity of common stock sales to the taxation of capital gains, see Feldstein and Yitzhaki (1978) and Feldstein, Slemrod, and Yitzhaki (1980).

8. See footnote 6 above.

Table 7.1 Capital Gains and Associated Tax Liabilities

| | Adjusted Gross Income Class | | | | | | | All | |
|---|-----------------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|---------------------|------|--------|
| | Less than Zero | \$10,000 to \$20,000 | \$20,000 to \$50,000 | \$50,000 to \$100,000 | \$100,000 to \$200,000 | \$200,000 to \$500,000 | More than \$500,000 | | |
| 1. Nominal capital gains | 86 | 77 | 21 | 369 | 719 | 942 | 1135 | 1280 | 4629 |
| 2. Real capital gains | -15 | -726 | -895 | -1420 | -255 | 437 | 839 | 1125 | -910 |
| 3. Tax on nominal capital gains | 1 | -5 | 23 | 80 | 159 | 215 | 291 | 374 | 1138 |
| 4. Tax on real capital gains | 0 | -25 | -34 | -52 | 58 | 141 | 235 | 337 | 661 |
| 5. Tax on nominal capital gains, no loss limit | 0 | -7 | -6 | -31 | 91 | 191 | 288 | 372 | 897 |
| 6. Tax on real capital gains, no loss limit | -1 | -38 | -94 | -259 | -97 | 72 | 209 | 325 | 117 |
| 7. Total tax liability, those with corporate stock capital gain | 10 | 224 | 1556 | 5492 | 3986 | 2467 | 1582 | 1133 | 16450 |
| 8. Total tax liability, all individuals | 16 | 15490 | 40895 | 32275 | 10367 | 4922 | 2480 | 1638 | 108084 |

NOTE: All figures relate to capital gains on corporate stock sold in 1973.

contrast, taxpayers with AGI's above \$100,000 had nominal gains of \$3.36 billion and real gains of \$2.40 billion.

The tax liabilities corresponding to these two measures of capital gains are compared in rows 3 and 4. In calculating these tax liabilities, individual losses are subject to the limit of \$1,000. In each AGI class up to \$50,000, recognizing real gains makes the tax liability negative. At higher income levels, tax liabilities are reduced but remain positive on average; the extent of the current excess tax—both absolutely and relatively—decreases with income. Thus taxpayers with AGI's between \$50,000 and \$100,000 paid an excess tax of \$101 million or nearly three times the appropriate tax on their real capital gains. By contrast, taxpayers with AGI's over \$500,000 paid an excess tax of \$37 million or only 11 percent more than the tax on their real capital gains. This pattern of capital gains and of tax liabilities shows why the total tax on real capital gains remains positive even though total real capital gains are negative.

The substantial real capital losses for taxpayers with AGI's below \$100,000 that are shown in row 2 suggest that the limit on the deductibility of capital losses has a substantial effect on tax liabilities when capital gains are measured in real terms. Lines 5 and 6 show the tax liabilities corresponding to nominal and real capital gains if the loss limitation is disregarded.⁹ For nominal capital gains there is only a modest difference since the general rise in prices substantially reduces losses. The total tax liability is reduced from \$1.14 billion to \$0.90 billion, with almost all of the difference in the liabilities of taxpayers with AGI's between \$20,000 and \$100,000. By contrast, with real capital gains the current loss limit raises tax liabilities by \$544 million or more than 80% of the \$661 million tax liability.

The importance of the current excess taxation of capital gains can be seen by comparing the excess tax with the total tax liabilities shown in rows 7 and 8. Row 7 shows the total tax liabilities for taxpayers who had any capital gain or loss on corporate stock. The excess tax liability can thus be compared with the total liability for the same groups of individuals. With the current loss limitation retained, this excess tax is roughly constant as a percentage of total tax for all groups with AGI's over \$20,000. For example, individuals with AGI's between \$20,000 and \$50,000 paid \$132 million in excess tax or 2.4 percent of their total tax liability of \$5.49 billion. For individuals with AGI's between \$100,000 and \$200,000, the extra tax is \$74 million or 3.0 percent of their total tax of \$2.47 billion. A maximum of 3.3 percent occurs for those with AGI's over \$500,000.

9. Recall that we are looking only at the stocks actually sold in 1973. Allowing unlimited deduction for losses would induce more sales of stocks with accrued losses. Our estimates should be interpreted as the extent of overtaxation of the stocks actually sold rather than as estimates of the effect of changing the law to remove the limit.

7.3 Taxing Equal Gains Unequally

The mismeasurement of capital gains does more than raise the effective tax rate on real capital gains. It also introduces an arbitrary randomness in the taxing of capital gains. Two individuals with the same real capital gain can pay tax on very different nominal gains. This section presents striking evidence that equal real capital gains are taxed unequally to a very substantial extent.

Table 7.2 compares the tax liability that would be due on real capital gains with the tax liability that was actually assessed on nominal gains.¹⁰ There is very substantial variation among individuals in the ratio of the tax liability on real gains to the liability on nominal gains. Consider, for example, the taxpayers with adjusted gross incomes between \$20,000 and \$50,000. Only 26.5 percent of the actual tax liability on nominal gains was incurred by taxpayers whose liabilities on real gains were between 90 percent and 100 percent of these nominal liabilities. An additional 18.4 percent of the actual tax liability was incurred by taxpayers whose liabilities on real gains would have been between 80 and 90 percent of their actual liabilities. The remaining 55 percent of actual tax liabilities were incurred by individuals whose liabilities on real gains would have been less than 80 percent of their actual statutory liabilities.

The disparities are even greater for taxpayers with lower AGI. Among those with AGI's between \$10,000 and \$20,000, 27 percent of actual liabilities were incurred by taxpayers whose liabilities on real capital gains were less than 40 percent of their actual statutory liabilities while an equally large amount (28.4 percent) of liabilities were incurred by taxpayers whose liabilities on real gains would have been nearly as large as their liabilities on nominal gains.

Table 7.3 shows this pattern of unequal taxation of real capital gains in a different way. This table shows the numbers of taxpayers at each level of liability on real capital gains who pay quite different amounts on nominal gain.¹¹ Thus, more than 220,000 of the taxpayers with real capital losses paid tax on nominal capital gains. Within this group, more than 3,000 paid capital gain taxes of over \$2,000 and nearly 1,000 paid taxes of over \$5,000. Similarly, among taxpayers who had real gains but with corresponding tax liabilities of less than \$1,000, more than 40,000 paid tax liabilities of more than \$1,000 and nearly 1,000 paid tax liabilities of more than \$5,000.

The same sense of substantial and arbitrary randomness is evident if we look at the rows of the table. For example, if we look at the 3,355

10. We have considered here only those returns with a positive nominal gain so as to avoid ambiguity in interpreting the sign of the ratios.

11. Our calculation ignores the small number of taxpayers whose short sales meant that their nominal gain would actually be less than their real gain.

Table 7.2 Distribution of Actual Tax Liabilities by Tax Liability on Real Gains as a Percentage of Tax Liability on Nominal Gains

| Tax Liability on Real Gains as Percentage of Tax Liability on Nominal Gains | Adjusted Gross Income (thousands of dollars) | | | | | | | | All Taxpayers |
|---|--|-------|-------|--------|---------|---------|------|------|---------------|
| | 0-10 | 10-20 | 20-50 | 50-100 | 100-200 | 200-500 | 500+ | | |
| Less than 0 | 13.5 | 11.0 | 6.1 | 5.6 | 2.5 | 1.1 | 0.3 | 3.4 | |
| 0 | 21.7 | 8.8 | 3.8 | 4.1 | 1.6 | 1.1 | 0.4 | 2.6 | |
| 10% | 0.8 | 1.7 | 0.8 | 1.3 | 1.0 | 0.4 | 0.1 | 0.7 | |
| 20% | 1.6 | 0.8 | 1.7 | 2.1 | 1.8 | 0.8 | 0.8 | 1.3 | |
| 30% | 3.8 | 4.5 | 5.0 | 4.1 | 1.7 | 1.2 | 0.3 | 2.4 | |
| 40% | 9.0 | 9.3 | 2.0 | 3.6 | 2.3 | 1.7 | 1.1 | 2.5 | |
| 50% | 9.7 | 5.3 | 4.4 | 3.4 | 3.5 | 2.5 | 0.6 | 2.9 | |
| 60% | 8.5 | 5.1 | 17.1 | 6.2 | 7.0 | 4.1 | 2.0 | 6.7 | |
| 70% | 2.3 | 9.2 | 14.1 | 12.9 | 11.7 | 8.5 | 3.9 | 9.6 | |
| 80% | 16.0 | 16.0 | 18.4 | 20.3 | 18.6 | 16.2 | 11.2 | 16.4 | |
| 90% | 24.5 | 28.4 | 26.5 | 36.3 | 48.2 | 62.3 | 79.3 | 51.5 | |

NOTE: Each entry is the percentage of the tax liability on the nominal capital gains as actually incurred by taxpayers in that AGI class. Computations consider only those returns which showed a positive nominal gain on corporate stock capital gains.

Table 7.3 Numbers of Taxpayers Classified by Tax Liabilities on Real Gains and Nominal Gains

| Tax Liability on Nominal Capital Gains (thousands of Dollars) | Tax Liability on Real Capital Gains (thousands of dollars) | | | | | | | | | | | |
|---|--|-----------|--------|--------|--------|-------|-------|-------|--------|-------|--|--|
| | Negative | 0-1 | 1-2 | 2-5 | 5-10 | 10-20 | 20-30 | 30-50 | 50-100 | >100 | | |
| Negative | 1,281,463 | | | | | | | | | | | |
| 0-1 | 213,632 | 1,083,048 | | | | | | | | | | |
| 1-2 | 7,416 | 33,820 | 36,055 | | | | | | | | | |
| 2-5 | 2,212 | 7,033 | 19,269 | 29,083 | | | | | | | | |
| 5-10 | 708 | 477 | 753 | 8,038 | 11,453 | | | | | | | |
| 10-20 | 196 | 174 | 49 | 616 | 2,617 | 6,402 | | | | | | |
| 20-30 | 54 | 34 | 127 | 40 | 208 | 1,049 | 1,843 | | | | | |
| 30-50 | 23 | 13 | 10 | 19 | 30 | 135 | 722 | 2,111 | | | | |
| 50-100 | 12 | 9 | 4 | 5 | 6 | 13 | 42 | 359 | 1,804 | | | |
| >100 | 1 | 5 | 0 | 1 | 0 | 2 | 3 | 19 | 234 | 1,810 | | |

Note: "Tax liability on nominal capital gains" is the actual 1973 liability. The "tax liability on real gains" is the corresponding liability if real gains were calculated by adjusting the basis for the change in the CPI.

taxpayers who incurred tax liabilities of \$20,000 to \$30,000, we find that 463 would have had liabilities of less than \$10,000 on their real gains.

In short, the effect of taxing nominal gains rather than real gains is of very little significance for some taxpayers but involves a very substantial distortion for others.

7.4 Alternative Tax Rules

This section examines the implication of price indexing the basis of capital gains in combination with two other proposals that have been frequently advocated: (1) taxing all corporate stock capital gains like short-term capital gains, i.e., eliminating the alternative tax method and the current exclusion of one-half of long-term gain, and (2) limiting income tax rates to 50 percent on so-called "unearned income" as well as "earned income."¹² Again we limit our attention to the tax consequences for the stocks actually sold in 1973 and thus disregard the way in which portfolio selling would be altered by these tax changes.

The current treatment of capital gains could be modified in either of two different ways. First, the current method of excluding one-half of long-term capital gains and of allowing the alternative tax could be ended while still limiting the deductible losses to \$1,000. Alternatively, the limit on loss deductibility could be suspended at the same time. Table 7.4 shows the effects of applying each of these rules to the corporate stock sales in 1973.

For convenience, the first four rows show the tax liabilities based on the current exclusion and alternative tax rules. The next four rows show the corresponding tax liabilities when the exclusion and alternative tax rules are eliminated. Simply eliminating these features while retaining the use of nominal gains and the loss limitation would have raised the tax liability from \$1.14 billion (row 1) to \$3.06 billion (row 5). Taxing only real gains but eliminating the exclusion and alternative tax would nearly double the 1973 tax liability from \$1.14 billion to \$2.20 billion (row 6). Only the combination of no loss limit and the taxation of real capital gains (row 8) would leave the total tax essentially unchanged at \$1.19 billion. Note that the distribution of this tax burden would be very different from the actual 1973 tax liabilities: liabilities would almost double for those with AGI over \$200,000 with offsetting falls for those with incomes under \$100,000.

A maximum tax rate of 50 percent would have little effect if the current definition of taxable income is maintained. This is shown in rows 5 through 8 of Table 7.5. The standard results for the current law and for price-indexed capital gains are shown for comparison in rows 1 through 4. The combination of a 50 percent maximum rate and the elimination of the capital gains exclusion and alternative rate (rows 9 and 10) significantly

12. Tax rates can still be somewhat higher than this because of the minimum tax.

Table 7.4 Tax Liabilities When Capital Gains Are Taxed like Ordinary Income

| | Adjusted Gross Income Class | | | | | | | All | |
|---|-----------------------------|------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|-----|---------------------|
| | Less than Zero | Zero to \$10,000 | \$10,000 to \$20,000 | \$20,000 to \$50,000 | \$50,000 to \$100,000 | \$100,000 to \$200,000 | \$200,000 to \$500,000 | | More than \$500,000 |
| 1. Tax on nominal capital gains | 1 | -5 | 23 | 80 | 159 | 215 | 291 | 374 | 1138 |
| 2. Tax on real capital gains | -0 | -25 | -34 | -52 | 58 | 141 | 235 | 337 | 661 |
| 3. Tax on nominal capital gains; no loss limit | -0 | -7 | -6 | -31 | 91 | 191 | 288 | 372 | 897 |
| 4. Tax on real capital gains; no loss limit | -1 | -38 | -94 | -259 | -97 | 72 | 209 | 325 | 117 |
| 5. Tax on nominal capital gains with all gains treated as short-term gains | 9 | 30 | 109 | 406 | 469 | 562 | 676 | 804 | 3065 |
| 6. Tax on real capital gains with all gains treated as short-term gains | 6 | -8 | 14 | 174 | 285 | 421 | 569 | 736 | 2196 |
| 7. Tax on nominal capital gains with all gains treated as short-term gains; no loss limit | 7 | 19 | 44 | 183 | 340 | 514 | 665 | 799 | 2571 |
| 8. Tax on real capital gains with all gains treated as short-term gains; no loss limit | 4 | -38 | -112 | -216 | 14 | 302 | 523 | 715 | 1193 |

NOTE: All figures relate to capital gains on corporate stock sold in 1973.

Table 7.5 Tax Liabilities on Capital Gains When the Maximum Tax Rate Is 50 Percent

| | Adjusted Gross Income Class | | | | | | | | | | All |
|--|-----------------------------|------------------|----------------------|----------------------|-----------------------|------------------------|------------------------|--------------------------|-----------------------|---------------------|-----|
| | Less than Zero | Zero to \$10,000 | \$10,000 to \$20,000 | \$20,000 to \$50,000 | \$50,000 to \$100,000 | \$100,000 to \$200,000 | \$200,000 to \$500,000 | \$500,000 to \$1,000,000 | More than \$1,000,000 | More than \$500,000 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| 1. Tax on nominal capital gains | 1 | -5 | 23 | 80 | 159 | 215 | 291 | 374 | 1138 | | |
| 2. Tax on real capital gains | 0 | -25 | -34 | -52 | 58 | 141 | 235 | 337 | 661 | | |
| 3. Tax on nominal capital gains; no loss limit | 0 | -7 | -6 | -31 | 91 | 191 | 288 | 372 | 897 | | |
| 4. Tax on real capital gains; no loss limit | -1 | -38 | -94 | -259 | -97 | 72 | 209 | 325 | 117 | | |
| (millions of dollars) | | | | | | | | | | | |
| - <i>Maximum Tax Rate of 50%</i> | | | | | | | | | | | |
| 5. Tax on nominal capital gains | 2 | -5 | 23 | 80 | 164 | 211 | 255 | 293 | 1022 | | |
| 6. Tax on real capital gains | 1 | -25 | -34 | -52 | 64 | 142 | 207 | 265 | 568 | | |

| | | | | | | | | | |
|--|----|-----|------|------|-----|-----|-----|-----|------|
| 7. Tax on nominal capital gains; no loss limit | 0 | -7 | -6 | -31 | 99 | 190 | 252 | 292 | 789 |
| 8. Tax on real capital gains; no loss limit | -1 | -38 | -94 | -258 | -85 | 81 | 187 | 256 | 49 |
| - <i>Maximum Tax Rate of 50%</i> | | | | | | | | | |
| - <i>All capital gains treated like short-term gains</i> | | | | | | | | | |
| 9. Tax on nominal capital gains | 7 | 29 | 109 | 402 | 453 | 494 | 537 | 584 | 2615 |
| 10. Tax on real capital gains | 5 | -9 | 13 | 171 | 276 | 374 | 455 | 535 | 1819 |
| 11. Tax on nominal capital gains; no loss limit | 6 | 18 | 44 | 180 | 329 | 452 | 529 | 580 | 2137 |
| 12. Tax on real capital gains; no loss limit | 3 | -38 | -112 | -218 | 15 | 269 | 419 | 520 | 857 |

NOTE: All figures relate to capital gains on corporate stock sold in 1973.

raises total tax liabilities. Only if this is combined with the taxation of *real* gains and a full offset of losses is the total tax kept to its current level. Again, there is a substantial redistribution within this total.

7.5 Concluding Comments

The evidence presented in this paper shows that the taxation of capital gains is grossly distorted by inflation. In 1973, the tax paid on corporate stock capital gains was \$1,138 million, nearly twice the \$661 million liability on real capital gains. If the limit on the deduction of real capital losses is disregarded, the net tax liability falls to only \$117 million. By this standard, nearly all of the tax paid on nominal capital gains represents an excess tax caused by inflation. Moreover, our current tax rules introduce an arbitrary randomness in the taxing of capital gains; with inflation, taxpayers with equal real capital gains are often required to pay tax on very different nominal gains.

The taxation of capital gains is distorted because, when there is inflation, our current tax rules mismeasure capital gains. Other aspects of capital income and expenses, primarily interest and depreciation, are also mismeasured in the presence of inflation. The taxation of capital income is therefore more severely distorted than the taxation of wages and salaries which are correctly measured. All types of personal income, including wages and salaries as well as capital income, are subjected to artificially high tax rates because of the progressivity of the tax structure but this "bracket rate effect" is small in relation to the distortions that result from mismeasurement.

Our estimates relate to 1973 because that is the only year for which data of the type that we have analyzed is available. There is, however, no reason to think that the tax distortion for 1973 was any greater than for other recent years. Indeed, since share prices were relatively high in 1973, the ratio of real capital gains to nominal gains would also be expected to be high. More generally, it is useful to consider the effect of our current tax law on an individual who invested twenty years ago in a diversified portfolio of common stock and sold this stock at the end of 1977. According to the Standard and Poor's Index, the price of such a portfolio approximately doubled between 1957 and 1977. However, the CPI also doubled in this twenty-year period, implying that there was no real increase in the value of the stocks.¹³ If the investor pays a 25 percent tax on the nominal capital gain when the stock is sold in 1977, he will actually have *lost* about 13 percent in real terms on his investment over the twenty-year period.

13. The increase in both the Standard and Poor's Index and the CPI was actually between 115 percent and 120 percent.

The problem of excess taxation of capital gains when there is inflation is not peculiar to the past twenty years but is inherent in our current tax system. Unless this aspect of the tax law is changed, the problem will continue in the future. If we abstract from fluctuations in the price-earnings ratio, the effect of retained earnings should make the real value of common stock rise at about 2 percent a year.¹⁴ If these accruing capital gains are taxed at an effective rate of 20 percent, the net after-tax yield is 1.6 percent a year. With a 6 percent steady rate of inflation and a constant price-earnings ratio, share prices would be expected to rise at 8 percent a year. This still leaves the same real before-tax increase of 2 percent that would occur without inflation.¹⁵ But a 20 percent capital gains tax on the 8 percent nominal capital gain leaves an after-tax nominal gain of only 6.4 percent. After subtracting the 6 percent inflation, the real after-tax gain is only 0.4 percent. The effective tax on real capital gains is thus 80 percent when the inflation rate is 6 percent. An 8 percent rate of inflation would make the effective tax rate equal to 100 percent!

The distorting effect of inflation on the taxation of capital gains could be remedied by adjusting the original cost of assets for the rise in the general price level.¹⁶ This would reduce the effective rates of tax on real capital gains and would thereby reduce the loss in economic welfare that results from such taxation of capital income.¹⁷ Measuring capital gains in real terms would have the further advantage of reducing the penalty for switching assets which currently distorts investor behavior.

14. If we correct the measurement of retained earnings for the artificial depreciation and inventory figures, the ratio of retained earnings to price averaged 1.9 percent for the period from 1957 through 1976. The calculation of this ratio for 1976 would proceed as follows. The uncorrected ratio of retained earnings to price is the difference between the earnings-price ratio and the dividend-price ratio, that is (8.90-3.77), or 5.13 (see the *Economic Report of the President, 1978*, table B-89). The correction factor is the ratio of retained earnings plus the capital consumption and inventory valuation adjustments to the value of unadjusted retained earnings. For 1976 this ratio is (44.5-14.1-14.5)/44.5) (all in billions of dollars), or 0.357. (See *Economic Report . . . , 1978*, table B-11.) Applying this adjustment factor to the 5.13 obtained above yields 1.83 as the percentage of corrected retained earnings to price for 1976.

15. Our calculations show that the effective rate on realized nominal capital gain was 24.5 percent in 1973. Since then tax legislation has raised significantly this effective tax rate through changes in the minimum tax and maximum tax. We use a 20 percent effective rate on accruing capital gains to reflect the advantages of postponement.

16. The substitution of a cash-flow or expenditure type income tax for our current system would also eliminate all such problems. See Andrews (1974) and U.S. Department of the Treasury (1977).

17. See Feldstein (1978b, chap. 12 below) for a discussion of the welfare loss of capital income taxation.