

The Lock-in Effect of the Capital Gains Tax:
Some Time-Series Evidence

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SUMMARY

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This study presents time-series evidence indicating that capital gains taxation reduces the realization of capital gains. The "lock-in" effect is detectable once we divide individuals into categories on the basis of how much recent capital gains tax increases have affected them. Since the tax law changes, those individuals who are affected have realized significantly less capital gains relative to those not affected. This analysis, in addition to evidence from cross-sectional research reported in Feldstein and Yitzhaki (1978) and Feldstein, Slemrod and Yitzhaki (1978), indicates that estimates of the tax revenue change resulting from a reduction in capital gains taxation based on the assumption of unchanged realized gains may be misleading.

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One issue in the current debate about lowering capital gains tax rates is the revenue cost of such a reduction. Much of the controversy has centered around the increased tax revenue that would result if the tax reduction stimulated the economy to a higher level of national income. Another, more direct, possibility is that the tax revenue loss would be mitigated by an increased volume of capital gains realizations coming at any given level of national income. Investors holding appreciated assets will be less "locked in" to their current portfolio when faced with a lower tax penalty to selling assets.

Some work we have done recently at the National Bureau of Economic Research¹ suggests that the positive response of corporate stock capital gains realizations to reduction in the capital gains tax rate is quite substantial. In fact, it may be so large that a cut in the capital gains tax would actually increase revenue from this type of capital gain. These studies used two different cross-sectional data sets to investigate the response of individual transactions behavior to the taxation of gains.

Our purpose in this note is to present some new evidence that a lock-in of capital gains can also be detected by looking at the aggregate data on all capital gains before and after the changes in the taxation of capital gains. The lock-in effect is evident once we divide individuals into categories on the basis of how much the tax changes have affected them.

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We divide individuals into three categories - (i) those with adjusted gross income (AGI) less than \$100,000, (ii) those with AGI between \$100,000 and \$500,000, and (iii) those with more than \$500,000 in AGI. Our reasoning is that the limitation on the alternative tax, the introduction of the tax on preference income, and the "poisoning" of earned income would primarily affect only those in the latter two categories, and affect the highest-income group more intensively than the middle group. This is illustrated by the following evidence. In 1974, (the latest year for which such information is available), 57% of the income in the highest class came from returns subject to the additional "minimum" tax on preferences, 14% of the income from the middle group was from additionally taxed returns, while less than a quarter of one percent of the income from the under \$100,000 group was subject to the minimum tax. The cutoff of the alternative tax similarly impacted largely the upper two groups, where the greatest concentration of returns with long-term capital gains exceeding \$50,000 occurs. In 1974, 98% of all the net capital gains of the highest group were made by returns with at least \$25,000 net gain (Note that \$50,000 of long-term capital gain is equal to \$25,000 of net gain as defined by the IRS). Eighty-eight percent of the net capital gain of the middle group was so concentrated, while only 22% of net capital gain of the lowest income group had at least \$25,000 net gain per return. Clearly the limitation of the alternative tax affects the highest income asset sellers much more often than the lowest.

Table I presents the recent history of the net gain from the sale of capital assets by income class.

Table I

Net Gain from Sales of Capital Assets, 1967-1976 (\$ billions)

Adjusted gross income	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Less than \$100,000	10.3	12.7	10.3	7.7	10.4	12.9	13.5	11.8	11.9	15.2
\$100,000 to \$500,000	2.6	3.6	3.1	1.9	2.6	3.4	3.2	2.4	2.4	3.2
More than \$500,000	1.7	2.6	2.7	1.1	1.6	2.1	1.5	1.2	1.2	1.5
Total	14.6	18.9	16.1	10.7	14.6	18.4	18.2	15.4	15.5	19.9

Source: Statistics of Income: Individual Tax Returns, 1972 to 1976 (1975 and 1976 data is preliminary). Figures for 1971 and before are taken from the historical summary presented in the 1972 volume.

The first thing we notice is that the total net gain bounces around substantially from year to year, even when the tax law is unchanged. Obviously there are factors other than taxes that influence realization of gains.

The most important law changes increasing the capital gains tax were contained in the Tax Reform Act of 1969, the relevant provisions of which took effect in the succeeding three years. In order to discern a lock-in effect, we ought to compare 1969 and before with 1970 and after. In addition we might expect increased gains realized in 1969 in anticipation of higher taxes starting in 1970.

The simplest comparison, between 1969 and 1970, provides the most striking evidence of a lock-in effect. While net gains of the presumably unaffected under \$100,000 class were 34% higher in 1969 than in 1970, they

were 63% higher for the \$100,000 to \$500,000 class, while the over \$500,000 class had 145% more gains in 1969. If we adjust the trend in gains by the change in the lowest-income class, the gains of the highest-income class were 111% higher in 1969 than in 1970.

Comparing these two years may be unfair if 1969 included anticipatory selling by the higher income classes, and there is some evidence that it did: while net gains of the lowest income class fell 19% from 1968 to 1969, net gain of the highest income class actually increased 4%.

A fairer and more relevant comparison would be an average of 1967 and 1968 net gains on the one hand and an average of 1975 and 1976 on the other, the two most recent years for which data is available. Table 2 makes this comparison. Note first that in 1975-6 the net gains of the lowest income class were somewhat higher than in 1967-8, so if anything the trend since then has been upward. Nevertheless, we see that the net gains of the middle group were about 12 percent lower in 1975-6 than they were in 1967-8, and that the net gain of the highest income class were 35 percent lower in 1975-6 than in 1967-8. This is an indication that the highest income individuals were much less likely to realize gains after the Tax Reform Act of 1969 than before.

Table 2
Comparison of Net Capital Gains for 1967-68 and 1975-76 (\$billions)

Adjusted Gross Income	1967-68	1975-76	% Change
Less than \$100,000	11.47	13.52	+17.9
\$100,000 - \$500,000	3.14	2.76	-12.1
More than \$500,000	2.12	1.38	-34.9

The evidence does not depend on the assumption that the relative respective income classes has remained constant over the past decade. If we normalize the net gains in each class by some measure of total income in the group, a similar (and more powerful) relationship holds. Table 3 specifically shows net capital gains as a percentage of adjusted gross income (not including the net capital gains) for our three groups.

Table 3

Net Capital Gains as a Percentage of Adjusted Gross Income
Net of Gains 1967-68 and 1975-76

Adjusted Gross Income	1967-68	1975-76	% Change
Less than \$100,000	2.36	1.42	-39.8
\$100,000 - \$500,000	37.4	9.72	-74.0
More than \$500,000	154.7	36.3	-76.5

While there has been a large decrease in the gain percentage for all groups, the upper two groups' decline was far more extreme than the lowest income group.

In sum, we can detect evidence of a lock-in effect in the aggregate data on net gains from capital assets. This, in addition to evidence from cross-sectional research, indicates that estimates of the revenue change resulting from a change in capital gains taxation based on the assumption of unchanged net realized gains may be misleading.

Footnote

- I M. Feldstein and S. Yitzhaki, "The Effects of the Capital Gains Tax on the Selling and Switching of Common Stock", Journal of Public Economics, 1978; M. Feldstein, J. Slemrod, and S. Yitzhaki, "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains, National Bureau of Economic Research, 1978.