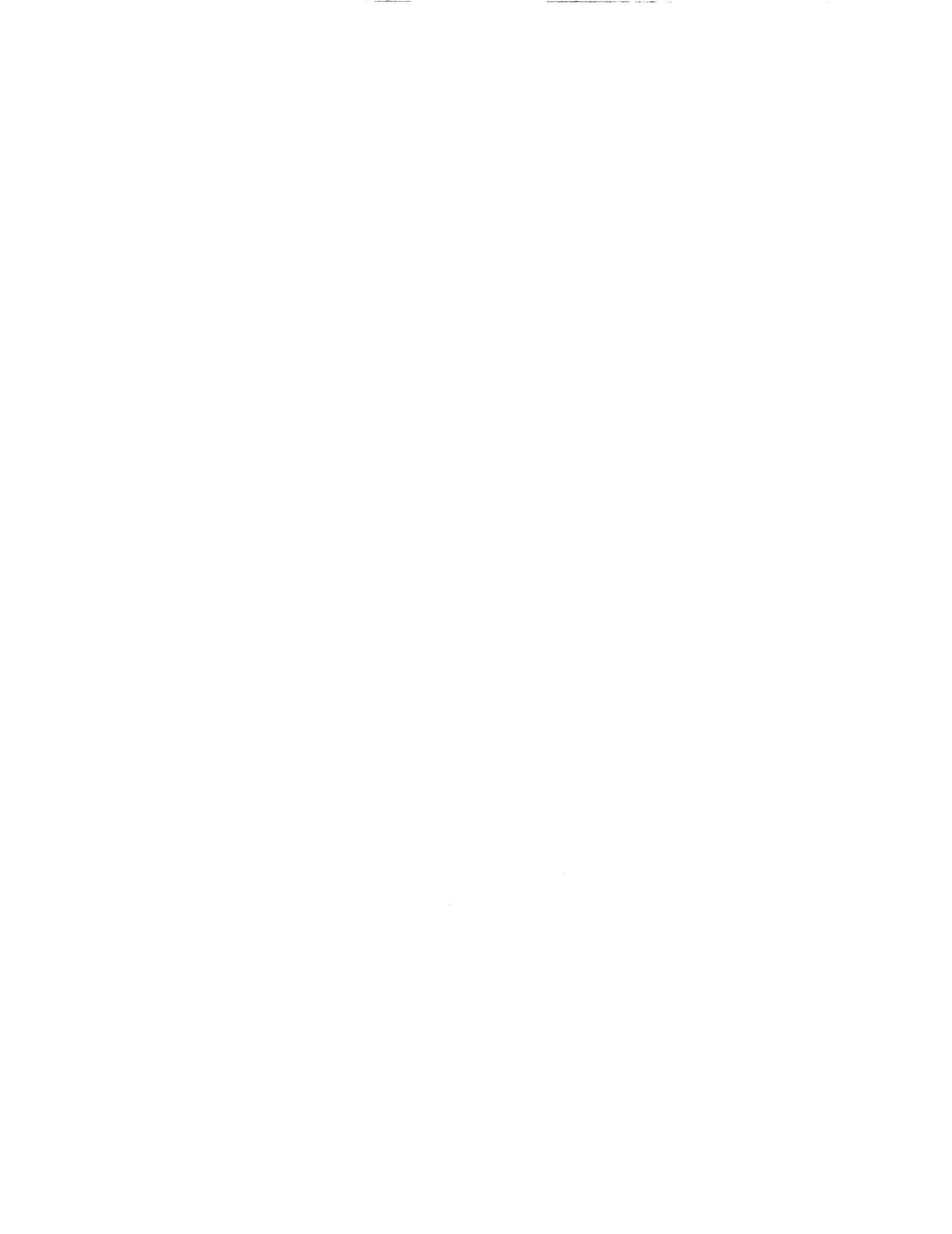


**REVENUE EFFECTS OF REDUCING
THE MINIMUM HOLDING PERIOD FOR LONG-TERM CAPITAL GAINS**

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REVENUE EFFECTS OF REDUCING THE MINIMUM HOLDING PERIOD FOR LONG-TERM CAPITAL GAINS

INTRODUCTION AND SUMMARY

This is an analysis of the minimum holding period for long-term capital gains under the federal individual income tax. It explains how changes in the minimum holding period would affect the amount of revenue collected.

The federal income tax law distinguishes among capital asset transactions according to the length of time that the assets are held. For assets held longer than one year, only 40 percent of net gains is included in adjusted gross income, and only 50 percent of net losses on such assets is deductible; gains and losses from shorter-term transactions are included in income in full.

Reduction of this one-year minimum holding period for the long-term capital gains exclusion would have revenue implications even if taxpayers did not change their behavior, but changes in behavior would further affect revenues. Taxpayers would be likely to accelerate some transactions and delay others to minimize their tax liabilities. There would be transition effects and also possibly long-term changes in realizations.

CBO estimates that the revenue loss of reducing the minimum holding period for long-term capital gains from one year to six months could be greater than the existing estimate made by the Joint Tax Committee (JCT), but if so, it would be by only a small amount. An upper limit on the loss would seem to be about \$295 million for a full year at calendar 1983 income levels, compared to the JCT's estimate of \$220 million. (Fiscal year 1984 receipts are assumed by JCT to be equal to calendar year 1983 liabilities; the assumed effective date for the holding period change is July 1, 1983, resulting in a one-half calendar year effect for fiscal 1984, shown in the following table.) The available data on which both of these estimates are based are extremely sketchy, and so any estimate is tentative. It is virtually certain, however, that reduction of the holding period would not cost more than its outright repeal, and the cost of repeal is known with much greater confidence to be about \$400 million for a full year at calendar 1983 income levels.

The reduction of the holding period could be less costly than the JCT estimates in the first year, because the number of assets newly qualifying for long-term status would be temporarily substantially increased, thus accelerating some realizations. After that transition, however, revenue costs should closely approximate the JCT estimate. Arguments that the reduction of the holding period would change the character of the securities markets and lead to large increases in taxable income and revenues in the long run cannot be proved wrong, but seem far-fetched in light of other features of the tax law and current investor behavior.



Joint Committee on Taxation
Estimate of Revenue Effect of Reducing Minimum
Holding Period to Six Months, Effective July 1, 1983
(By fiscal year, in millions of dollars)

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Revenue Effect	110	234	251	268	287

CURRENT LAW

Under the tax law now in effect, capital gains and losses are treated in different ways according to the length of time capital assets are held before they are sold. If an asset is held for one year or less, the gain or loss is treated generally like ordinary income, and is called a "short-term gain" or "short-term loss." In contrast, if the asset is held for more than one year, only 40 percent of any resulting gain (called a long-term gain) or 50 percent of any resulting loss (or long-term loss) is included in adjusted gross income (AGI).

Thus, any reduction in the minimum holding period for long-term capital gain or loss treatment will have two separate effects (without considering changes in taxpayer behavior, which will be discussed later). First, a shorter holding period would reclassify some short-term gains as long term, thereby reducing the amount of income subject to tax and reducing tax revenues. Second, and partially offsetting the first effect, a shorter holding period would also reclassify some short-term losses as long term, thereby reducing the amount of loss deductible from gross income and increasing tax revenues.

This generalized description hides two subtleties, however, that could significantly affect the revenue consequences of any change in the minimum holding period. These factors are quite complex; they are summarized here in Figure 1, and are explained in more detail in the appendix. The practical effect of these subtleties is to reduce the significance of the exclusion of net long-term loss in the determination of tax liability. As the figure shows and the appendix explains, the exclusion of 50 percent of net long-term loss has an actual effect on current or future tax liability only:

- (1) If the net long-term loss is not offset by net short-term gain in the same year;
- (2) To the extent of a \$3,000 deduction against ordinary income, with any excess carried forward to future years; and

FIGURE 1. TAXABLE AMOUNTS OF CAPITAL GAINS AND LOSSES

		If long-term result is ..	
		Net Gain	Net Loss
... and short-term result is ...	Net Gain	Taxable amount is 100 percent of short-term gain plus 40 percent of long-term gain.	If short-term gain less long-term loss (in full) is a net gain, taxable amount is short-term gain less long-term loss (in full). If short-term gain less long-term loss (in full) is a net loss, deductible amount is lesser of (a) 50 percent of excess of long-term loss (in full) over short-term gain; or (b) \$3,000. Any excess over \$3,000 is carried forward to future years.
	Net Loss	If long-term gain (in full) less short-term loss is a net gain, taxable amount is 40 percent of excess of long-term gain (in full) over short-term loss. If long-term gain (in full) less short-term loss is a net loss, deductible amount is lesser of (a) excess of short-term loss over long-term gain (in full); or (b) \$3,000. Any excess over \$3,000 is carried forward to future years.	Deductible amount is lesser of (a) 100 percent of short-term loss plus 50 percent of long-term loss; or (b) \$3,000. Any excess over \$3,000 is carried forward to future years; net short-term loss is used first.

- (3) If in future years, the net long-term loss carryforward is not offset by either net long-term gain or net short-term gain, and then only to the extent of a \$3,000 deduction per year.

Thus, the revenue-increasing effect of a reduction of the minimum holding period is strictly constrained by provisions in the tax law, and would have little impact on tax liabilities. The tax-reducing effects would, therefore, dominate the tax-increasing effects.

REVENUE EFFECTS OF REDUCING THE MINIMUM HOLDING PERIOD FROM ONE YEAR TO SIX MONTHS

The changes in total federal income tax revenues that would occur if the minimum holding period was reduced from one year to six months can be divided into two parts. First, tax revenues would change if the minimum holding period was reduced, but there were no changes in taxpayer behavior. Estimating the revenue change under the assumption that behavior is constant is the most straightforward part of the overall analysis. Taxpayer behavior is seldom completely unchanged in the face of changes in the tax law, however; taxpayers' behavioral responses would be the second effect on the revenue that would be collected given any change in the tax law. Taxpayer responses to the tax law's incentives to engage in productive activities such as work, saving, and investment are widely discussed. Less frequently mentioned, but also important, are incentives for taxpayers to reduce their tax liability on any given level of pretax income. Taxpayers are expected to act in a fashion so as to minimize their legally due tax; if they were not, there would be no point to the many tax incentives included in the law. The combination of the static effects of the change in the law (that is, assuming constant behavior) and the dynamic effects (that is, the effects of the changes in behavior) yields the total effect of the tax law change. These effects are discussed separately below.

Static Revenue Effects

Barring changes in taxpayer behavior, a reduction in the minimum holding period would change tax revenue by separately changing the tax treatment of capital gains and capital losses.

Minimum Holding Period and Capital Gains. If the minimum holding period was reduced from one year to six months, capital gains now realized after holding periods of more than six months but no more than one year would be reclassified as long-term capital gains. They would thus qualify for the capital gains exclusion and result in a static revenue loss (unless such gains were offset by capital losses). Estimating the revenue effect of such a change under an assumption of unchanged behavior would be relatively straightforward with adequate data. Unfortunately, the available data are not adequate for the task. Data on the precise holding periods (that is, by number of

months rather than the simple "long-term"/"short-term" dichotomy) for capital gains and losses are collected only infrequently. In the three years for which data are available--1962, 1973, and 1977--the holding period was different from what it is now (in 1962 and 1973 it was six months, and in 1977, nine months). Thus, given that the pattern of realization of gains is significantly influenced by the minimum holding period, it is impossible directly to infer from the noncomparable historical data the division of current short-term realizations between those with holding periods of six months or less, and those with longer holding periods.

Further, since even the most recent collection of capital gains data in 1977, there have been tremendous changes in the financial assets markets which are the vehicles for much of the total realized capital gain and loss each year. Trading in options and futures, on which very quick turnover is quite common, has increased dramatically. In 1977, \$10.9 billion of options were traded; in 1981 the corresponding figure was \$41.7 billion (down from \$45.8 billion in 1980). Similarly, futures trading increased from 42.8 million contracts in 1977 to 98.5 million in 1981 (a small increase from 1980).

These trends are evident in the data on capital gains and losses reported on taxable returns. Table 1 shows that short-term capital gains increased almost seven-fold over the period from 1973 to 1980, while long-term capital gains only doubled. Similarly, short-term capital losses tripled over the period, while long-term losses were flat. The increase in the share of losses realized short term could be the result of greater tax consciousness on the part of investors. But the more rapid growth of realized short-term gains would run contrary to the taxpayers' interests if they had any opportunities to realize long-term and profit from the exclusion; this is especially true in light of the large tax cut for long-term gains in 1978. The growth in both short-term gains and losses also could not be caused entirely by the lengthening of the minimum holding period in the Tax Reform Act of 1976, because so much of the growth occurred after 1978 when the lengthening was already fully phased in. The likely cause of this trend, apart from any fluctuations in market conditions, would therefore seem to be the dramatic growth in short-term investment opportunities.

Minimum Holding Period and Capital Losses. If the minimum holding period was reduced to six months, capital losses realized after assets were held between six months and one year would be reclassified as long-term capital losses. Only 50 percent of such losses could be offset against ordinary income, resulting in a static revenue gain (1) if such losses were not offset by other capital gains; and (2) only to the extent of a \$3,000 offset against AGI, with any excess loss carried forward to future years (see Figure 1 and the appendix). Thus, the static revenue pickup due to reduction of the minimum holding period would be conditional upon the taxpayer's circumstances.

The same limitations of available data on holding periods for realized gains apply to realized losses. There is no straightforward way to infer the pattern of

capital loss holding periods by month under the current law from available information.

TABLE 1. REALIZED CAPITAL GAINS AND LOSSES ON TAXABLE RETURNS, 1973-1980 (In billions of current dollars)

	<u>Capital Gains</u>		<u>Capital Losses</u>	
	Short Term	Long Term	Short Term	Long Term
1973	0.8	35.7	4.4	9.9
1974	0.7	27.8	5.5	11.6
1975	1.0	27.1	3.8	13.2
1976	1.1	35.6	4.6	11.2
1977	1.9	41.5	5.9	12.1
1978	2.6	47.1	5.9	10.7
1979	3.2	69.6	10.3	9.2
1980	5.3	70.5	12.7	8.9

SOURCES: Internal Revenue Service, Statistics of Income, Individual Income Tax Returns, 1973 through 1980.

Dynamic Revenue Effects

As is noted above, taxpayers can be expected to change their behavior to maximize their after-tax income whenever the tax law changes. In the case of a reduction of the minimum holding period for long-term capital gains, taxpayers could be expected to change at least three aspects of their behavior: first, the amount of gains and losses that they realize; second, the timing of their realizations of gains; and third, the timing of their realizations of losses.

Minimum Holding Period and Amount of Gains Realized. A shorter holding period would reduce the effective tax rate on capital gains from the seventh through the twelfth month that any asset was held. Theory suggests that the lower tax rate would induce taxpayers to realize more gains than they otherwise would.¹ This

1. Charles C. Holt and John P. Shelton, "The Lock-In Effect of the Capital Gains Tax," National Tax Journal, vol. 15 (December 1962), pp. 337-52; and Beryl W. Sprinkel and B. Kenneth West, "Effects of Capital Gains Taxes on Investment Decisions," Journal of Business, vol. 35 (April 1962), pp. 122-34.

tendency was used to argue that the tax cuts for long-term capital gains in the Revenue Act of 1978 would pay for themselves several times over. These claims, however, have been found to be greatly exaggerated.²

While a reduction in the minimum holding period might induce some additional realizations, the effect is likely to be significantly smaller proportionally than that of a tax cut for all long-term gains, such as those of 1978 and 1981. The reduction of the holding period does not make the tax treatment of long-term gains any less onerous; it merely makes the exclusion available somewhat sooner. It does not affect assets already held for one year or more, while the 1978 tax cut at least potentially affected all assets. Because any taxpayer could obtain long-term tax treatment by waiting another six months to sell, it seems unlikely that a reduction in the holding period would cause any tremendous burst of additional realizations.

Some analysts have argued that a shorter holding period would significantly increase the rapidity of asset turnovers, and thus accelerate the receipt of income and increase tax revenues. Any such revenue increase would not hold up over the long run, however. Turnover might accelerate, but more rapid turnover of assets that appreciate at unchanged rates would not increase the dollar amount of realized capital gains. Rather, it would result in more frequent but smaller realizations of gains. (For example, consider a share of stock purchased at \$100 and appreciating at 10 percent annually. If it were sold every six months, two \$5 gains (ignoring compounding) would be realized in the first year. If it were sold only once a year, there would be only one realization, but it would be for \$10 rather than \$5.) Thus, there is no reason to believe that a shorter holding period and more rapid turnover would lead to more dollars of realized gains after an initial transition period.

A revenue increase over the long run would require more than just an increase in the frequency of turnover of assets. The reduction of the holding period would have to raise the level of the stock markets or induce an unlocking of those asset holdings that now turn over infrequently or not at all (that is, cause new and additional realizations rather than merely accelerate realizations that would have occurred anyway). The holding period reduction seems unlikely to succeed on either of these counts. As was noted before, a six-month holding period would offer the same treatment of long-term gains, but merely allow it six months earlier. Further, the nature of the markets today does not seem highly sensitive to the holding period. There were 38.3 billion shares listed on the New York Stock Exchange in 1981; 15.9

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2. Martin Feldstein, Joel Slemrod, and Shlomo Yitzhaki, "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains," Quarterly Journal of Economics, vol. 94 (June 1980), pp. 777-91; and Joseph J. Minarik, "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains: Comment," Quarterly Journal of Economics (forthcoming).



billion shares were traded, suggesting an average holding period of 2.4 years. In 1973 (the latest year for which data are available), the average share of stock realized for a gain was held for 2.0 years. (Since this figure does not include unsold shares, the average holding period for all shares actually was longer.) Thus, most assetholders--including tax-exempt investors, who would not be affected by the provision--apparently are investing for longer-term profits and would be unlikely to bid up the entire market just because of a reduction in the holding period. (Smaller stock exchanges, including the American, would be more significantly affected, but could hardly outweigh the inertia in most asset markets.) Finally, many assets now are locked in after being held much longer than six months or one year because of tax provisions far more powerful than a reduction of the minimum holding period. These include the deferral of tax on accrued gains until realization (no tax is collected until an asset is sold, no matter how much it increases in value), and the potential avoidance of all income tax on capital gains through step-up of basis of assets passed on at death (an heir pays capital gains tax only on appreciation since he inherited an asset, not on appreciation that occurred before that time). Given these tax provisions that involve tens of billions of dollars in revenues and have caused long deferrals of realizations under different minimum holding periods, it seems unlikely that a change in the holding period, which would reduce revenues in the first instance by only several hundred million dollars, would alter the character of the asset markets.

There would likely be a temporary increase of realizations at the effective date of the provision, however. As was noted earlier, taxpayers who want to realize gains quickly often sell as soon as they meet the one-year minimum holding period and can obtain the long-term capital gains exclusion. If the holding period was reduced on a particular date, there would be a large group of assets held longer than six months but less than one year that could be sold immediately with long-term capital gains treatment. This rush of realizations would reduce the tax revenue loss in the short run because it would produce more taxable income; but it would be a one-time phenomenon. After the backlog of assets newly qualified for long-term treatment was liquidated, the flow of assets reaching a six-month holding period at any given time would not be very different from the flow now reaching a one-year holding period at any given time.

Minimum Holding Period and Timing of Realization of Gains. Taxpayers can be expected to change their behavior to take maximum advantage of any change in the tax law. One way that taxpayers could take advantage of a shorter minimum holding period would be to change the timing of their realizations of gains. Those taxpayers who now realize gains between six and twelve months would clearly benefit from a reduction of the holding period, but those who now realize gains in less than six months might change their habits to take advantage as well, holding their assets to the full six months. Such a shift in behavior would both postpone the realization of income and reduce the rate at which it was taxed, thereby reducing revenue. Again, this effect would probably be small and would largely dissipate over a long period of time.

Minimum Holding Period and Timing of Realization of Losses. Under current law, taxpayers try to realize losses in less than one year, to take advantage of the potentially greater loss offset against ordinary income. (Taxpayers who do not anticipate using capital losses to offset ordinary income might ignore this distinction.) If the minimum holding period was reduced to six months, however, taxpayers could be expected to review their five- and six-month old investments, rather than their eleven- and twelve-month-old investments, to find any losses that should be realized for tax reasons. This shift in behavior would accelerate reductions of income and possibly increase the offset against ordinary income, and therefore tend to reduce tax revenue. Once again, this effect would likely be small in the short run and even smaller in the long run.

These changes of timing behavior would alter the static revenue impact in different ways. The postponement of realization of short-term gains, to qualify them as long term, would tend to reinforce the static revenue loss with respect to gains. On the other hand, the acceleration of realization of losses, to qualify them as short term, would tend to offset the static revenue gain associated with losses. Any increase in realizations of gains would tend to offset that static revenue loss. All of these behavioral responses would tend to be small, but the important point is that their net effect would be ambiguous. Therefore, considering only one behavioral effect and ignoring the others would distort any analysis of the minimum holding period.

Evidence From 1977-1978

The Tax Reform Act of 1976 lengthened the minimum holding period for long-term capital gains from 6 months to 9 months in 1977 and to 12 months in 1978, where it has remained to the present. The current interest in reversing this process makes the 1977-1978 experience valuable as an indicator of the likely revenue effect.

Historical evaluation of a policy change is perilous because changes in circumstances beyond the change in the law always influence the outcome, thereby confusing the analysis. In the case of the lengthening of the minimum holding period, the subsequent increase in the capital gains exclusion and the growing importance of futures and options markets make interpretation of the 1977-1978 experience difficult.

When the minimum holding period was lengthened, the expected outcome was for both short-term gains and short-term losses to increase. Short-term gains did in fact more than double between 1976 and 1978, as Table 1 shows, suggesting that some investors were forced to realize gains without taking advantage of the exclusion, thus increasing revenues. Contrary to expectations, short-term losses hardly increased at all, despite the advantage in realizing losses short term; long-term losses were also virtually flat, however, suggesting that the relatively stable stock market over that

period rather than unexpected taxpayer behavior might be the prime cause. In any event, the slow growth of short-term losses also meant more tax revenue.

The data for 1979 and 1980, however, raise some doubts about the correctness of preconceptions regarding the 1976 law. Short-term gains continued to increase rapidly, even though the lengthening of the minimum holding period was already fully phased in and the 1978 tax cut strongly encouraged investors to postpone sales and realize gains long term. Short-term losses also leaped. Whatever the explanation--continued growth in options and futures markets and fear of an impending market downturn in 1980 are two possibilities--the 1979 and 1980 data suggest that the lengthening of the minimum holding period did not increase revenues by as much as the 1977-1978 figures suggest. Nonetheless, a presumption that the lengthening did increase revenues to some degree remains.

Revenue Estimates

S. 13 (introduced by Senator Dole) provides for a reduction in the minimum holding period for long-term capital gains to six months. The Joint Committee on Taxation (JCT) has estimated the revenue cost at \$110 million in fiscal 1984 (one-half of the full calendar year 1983 effect, based on the assumed July 1, 1983 effective date), \$234 in 1985, and \$251 million in 1986. The estimate is based on an assumption that the reduction in the minimum holding period plus changes in taxpayer behavior would result in conversion of 22 percent of short-term gains into long-term gains and 26 percent of short-term losses into long-term losses, in keeping with the general pattern of recent realizations data.

Nature of the Estimate. Revenue estimates for tax changes do not normally take into account so-called "feedback effects," that is, the kinds of behavioral responses just described. The reason is that such changes in behavior typically cause changes in the level of utilization of resources in the economy, and it is assumed that, in the short run, the federal government uses its other tools (including spending and monetary policy) to achieve the maximum feasible utilization. In the short run, the feedback effects are therefore part of the economic forecast underlying the revenue estimate, not of the revenue estimate itself.

Much of the feedback effect of a capital gains tax cut is inherently different. If a taxpayer chooses to sell a piece of appreciated property, the resulting capital gains income does not absorb resources in the economy; there is merely an exchange of the money of one taxpayer for the preexisting property of another. (There is some use of resources in, for example, a broker's time in selling the asset; but such absorption of resources is very small at the margin relative to the amount of the transaction.) Therefore, forecasting additional taxable income as the result of an assumed increase in the number of capital transactions does not conflict with the underlying forecast because it does not imply a greater utilization of real resources.

One difficulty of estimating revenues resulting from a change in capital gains taxation is that there is no obvious choice of which behavioral changes should or should not be included in the estimate. This difficulty never arises in analyses of other tax changes, because behavioral responses that involve changes in the utilization of real resources must be subsumed in the underlying forecast. Thus, capital gains tax revenue estimates are unique, and there is as yet no consensus on a methodology.

Given the imprecision of the historical data on realizations of capital gains by the number of months assets were held and the absence of a clear-cut standard for analysis of likely behavioral responses to capital gains tax changes, the Joint Tax Committee estimate of the long-run revenue loss caused by a change to a six-month holding period (and the assumed change of realization patterns underlying it) must be judged quite reasonable but still uncertain. Taxpayer behavior might be different from what was expected. Taxpayers might choose to realize more capital gains, for example, reducing the estimated revenue loss, or they might be more tax conscious than expected and postpone the realization of more gains to attain the most favorable tax treatment, thereby increasing the revenue loss. Because the likelihood of substantial increases of realizations beyond the very short run is small, as was explained earlier, the remainder of this section explores the sensitivity of the revenue estimate to the latter possibility.

Sensitivity of Revenue Estimate. While the data on actual holding periods by number of months are quite poor, there is a reliable benchmark to which estimates of revenue effects can be compared. The revenue loss from a complete elimination of the holding period can be quite accurately estimated with existing data; that figure is approximately \$400 million at fiscal 1984 levels (assuming no behavioral effects), or about twice the initial full-year effect (that is, the effect at fiscal 1984 income levels for a full year) of the reduction of the holding period to six months. (The estimate for repeal of the holding period is more accurate because all gains and losses, rather than some uncertain fraction, are converted from short term to long term.) Thus, it can be said with confidence that any reduction (but not elimination) of the holding period would lose less than \$400 million, and the analysis can concentrate on how any estimate relates to that figure. (It is conceivable that the revenue loss of reducing the holding period could exceed that of repeal; taxpayers could realize all their gains long term but realize more losses short term, and thus have greater offsets against ordinary income. This outcome is far from likely, however. It could also be argued that outright repeal of the minimum holding period is a qualitatively different step from mere reduction, and that taxpayer behavioral responses to repeal would be far greater.)

Table 2 shows the latest data on the distribution of capital gains realizations by holding period for calendar year 1977. The data are restricted to gains and losses on corporate stock. These figures indicate that taxpayers accelerate their realizations of losses and postpone their realizations of gains to take maximum advantage of the holding period. Thus, the table shows an acceleration of realization of losses as the

TABLE 2. REALIZATIONS OF GAINS AND LOSSES ON CORPORATE STOCK FOR CALENDAR YEAR 1977,^a BY MONTHS HELD (In millions of current dollars)

Months Held	Gains	Losses
0 - 1	214.5	114.5
1 - 2	165.7	119.7
2 - 3	146.9	138.2
3 - 4	120.6	111.2
4 - 5	131.3	99.8
5 - 6	94.9	94.5
6 - 7	174.1	108.7
7 - 8	84.4	120.1
8 - 9	84.9	163.2
9 - 10	83.1	28.6
10 - 11	127.2	93.8
11 - 12	317.3	256.4

SOURCE: U.S. Department of the Treasury, Office of Tax Analysis.

- a. Minimum holding period for long-term capital gains treatment in 1977 was nine months.

(then nine-month) minimum holding period approaches, with a sharp drop-off when it is reached, and the opposite behavior for realizations of gains. Inferring a precise pattern of behavior for a future change in the holding period from these data is impossible, however, largely because the nine-month minimum holding period of 1977 was different from current law and also was itself a one-year transition device to a full-year minimum holding period starting in 1978.

The 1977 data could be used in a crude fashion, however, to choose alternative assumptions involving stronger tax-motivated changes of behavior. For example, the 1977 data show taxpayers realized 36 percent of their short-term losses in the last three months of the minimum holding period; they might be expected to allow only half of that figure, say 18 percent of all short-term losses, to be converted into long-term losses by a change of the minimum holding period (rather than the Joint Tax Committee's assumed 26 percent). Likewise, in last three months of the minimum holding period, taxpayers realized 28 percent of their short-term gains; they might be expected to allow that share of their short-term gains to become long term (rather than the Joint Tax Committee's assumed 22 percent). These alternative assumptions can be used to show the sensitivity of the Joint Tax Committee's estimate to more tax-oriented behavior.



At the same time, these alternative assumptions are themselves open to question, and might well be an outer bound to the range of feasible taxpayer behavior for two reasons. First, they are based on an interpretation of 1977 data on sales of corporate stock, an asset that is highly liquid and whose time of realization is easy to control. Taxpayers might have much less flexibility in changing the timing of realization of other assets. Second, the tremendous increase in realized short-term gains and losses in recent years, after both the most recent shortening of the holding period and the 1978 tax cut for long-term gains took full effect, suggests that trading in very short-term financial assets is becoming increasingly important. Much of the trading in these assets occurs very quickly and might not be affected without an even greater reduction of the minimum holding period. Therefore, percentage changes in short-term realizations greater than those hypothesized here are unlikely.

The Joint Tax Committee's simulation of the alternative behavioral assumptions described above suggests that a drastic departure from the original revenue estimate is unlikely. CBO's analysis shows that the initial full-year revenue loss would increase by only about 34 percent--from roughly \$220 million to about \$295 million. This suggests that, even within the relatively confined range of a maximum \$400 million revenue loss (from elimination of the holding period), the potential deviation from the original \$220 million estimate is quite small.

As was suggested above, the revenue effect will change over time. One particular timing question that is highly relevant to the feedback issue is the transition from a 12-month to a six-month holding period. The Joint Tax Committee made no explicit assumptions regarding transition effects, but the transition could be significantly different from the long run. If a six-month minimum holding period became effective on July 1, then some assets that would have become eligible for long-term capital gains treatment only in 1984 would instead become eligible in 1983. (That is, assets purchased between January 1 and June 30 of 1983 would attain the six-month minimum holding period in the second half of 1983 instead of the first half of 1984. This is in effect an extra six months' worth of asset purchases newly qualifying for long-term gains treatment in 1983, over and above the purchases of calendar 1982 that are newly qualifying under current law.) If capital gains on these assets were realized as soon as the minimum holding period was attained, the resulting acceleration of income receipts from 1984 to 1983 would reduce the first-year revenue loss that would otherwise occur.

The imprecision of the available data makes any estimate of this acceleration very tenuous. There is no way to judge with confidence how much taxable income would be moved from 1984 to 1983 by using the few years of available data based on minimum holding periods different from that in current law. The data suggest very roughly that the first-year acceleration for corporate stock might reduce the revenue loss attributable to that type of asset by about half, and that there might be some effect for financial assets other than corporate stock.

Weighted against this acceleration effect, however, must be several counter-acting effects. First, for the acceleration to achieve the order of magnitude suggested here, some gains on assets purchased in May and June of 1983 would have to be realized in November and December of 1983, but taxpayers typically postpone realizations of gains from one calendar year to the next to delay payment of tax. (In 1973, the latest year for which detailed data are available, only 6.6 percent of all long-term gains on corporate stock was realized in November and 8.4 percent in December, as against 10.7 percent in January of the same year.) Further, while realizations of gains on corporate stock and other financial assets might be accelerated, other types of assets are likely less liquid and therefore less subject to acceleration of this sort. Thus, while the first year revenue loss would likely be less than the JCT's estimate, a reduction of that estimated loss by about half would seem to be the outside limit on the basis of our very imprecise data. (The Joint Tax Committee's omission of this transition effect can arguably be justified on the ground that realizations of losses, as well as gains, would temporarily increase. While undeniably true, this argument might be heavily discounted for two reasons. First, a tax-motivated acceleration of realizations of losses to just before the July 1 transition might have highly limited revenue implications, at least for fiscal 1984, because of the \$3,000 limitation on capital loss offsets against ordinary income. Second, such an acceleration would likely only move those realizations within calendar 1983, because taxpayers would probably realize those losses for tax reasons before the end of that year even without a change in the law.)

In subsequent years, however, the amount of newly qualifying assets could be expected to return quickly to its former long-term trend; then, only 12 months of asset purchases would achieve the minimum holding period in any year, just as before. As a result, realizations of newly qualifying assets should return to their old trend, and the revenue loss should manifest itself.

A final consideration for any estimate is the sensitivity of the revenue loss to the state of the stock market. The JCT estimate is based on historical capital gains aggregates extrapolated into the future at normal rates of growth. The growth of stock market values since the estimate was made, however, has been extraordinary. With short-term gains as defined under current law up sharply, as they likely are, the revenue cost of converting many of those gains to long term could be much greater than the JCT figure. Of course, such a greater revenue loss would occur only if the stock market continues to rise, and prediction of such a trend should probably remain outside the scope of any revenue estimate; nonetheless, the possibility of a revenue loss greater than estimated must be considered.

APPENDIX

There are two technical factors in the tax treatment of capital gains and losses that have important implications for the revenue effect of any change in the minimum holding period:

- o treatment of partially offsetting gains and losses; and
- o statutory limitation on amount of capital loss that can be offset against ordinary income.

Treatment of Partially Offsetting Gains and Losses. The taxpayer's first step in computing his capital gain or loss in adjusted gross income (AGI) is to net out separately his individual short-term gains and losses against one another, and then his long-term gains and losses against one another. The next step is to compare the net short-term gain or loss with the net long-term gain or loss. If there are both net short-term and net long-term gains, then all of the net short-term gain and 40 percent of the net long-term gain are added to AGI. If there are both net short-term and net long-term losses, then (subject to a limitation explained later), all of the net short-term loss and 50 percent of the net long-term loss are deducted from AGI. In only these two cases--when the taxpayer has both net long- and short-term gains or net long- and short-term losses--does the generalization of taxing all of short-term and part of long-term capital gains or losses precisely hold true.

If the taxpayer has offsetting net short- and long-term capital gains and losses (either a net short-term gain and a net long-term loss, or as is more common, a net short-term loss and a net long-term gain), then those amounts in full are netted out before any capital gains exclusion is computed. Thus, if a taxpayer has an excess of net long-term loss over net short-term gain, he may deduct (subject to a limitation) 50 percent of the excess from AGI; the 50 percent capital loss exclusion is applied only to the excess of net long-term loss over net short-term gain, not to all of net long-term loss. Likewise, if a taxpayer has an excess of net long-term gain over net short-term loss, he must add 40 percent of the excess to AGI; again, the 60 percent capital gains exclusion applies only to the excess, not to all of the gain. Therefore, to the extent that individual capital gain and loss transactions offset one another in arriving at the final net gain or loss, their character as short-term or long-term (and thus the minimum holding period) is irrelevant; the exclusion for long-term gain or loss applies only to the excess over short-term gain or loss.

Statutory Limitations of Offset. A second important factor in the revenue implications of the minimum holding period is the statutory limitation on the amount of capital loss that can be offset against ordinary income (that is, AGI from sources other than capital asset transactions). Under current law, taxpayers may deduct at most \$3,000 of net capital losses from AGI in any one year. The limitation is intended to prevent taxpayers with large, diversified portfolios from holding their assets that appreciate, and thereby incurring no tax on capital gains, while realizing

losses on their assets that fall in value, thereby offsetting all income from other sources and wiping out all tax on income from capital gains or any other source. The law therefore requires that any excess of capital losses over a \$3,000 deduction from AGI be carried forward to future years and used then. Carryforwards retain their character as short-term or long-term losses, and short-term loss carryforwards are used first.

When these factors are considered together, it is clear that taxpayers have an incentive to realize capital gains long term rather than short term (that is, to hold appreciated assets longer than one year before selling them), because the tax on long-term gains is 60 percent less (provided that the long-term gains are not offset by long-term or short-term losses). Data on actual realizations indicate that taxpayers perceive this incentive and act accordingly.³ At the same time, taxpayers are induced to realize their losses more quickly, because short-term losses may be offset against ordinary income in full, whereas only 50 percent of long-term losses may be so offset. The incentive to accelerate realizations of losses is conditional, however. The advantage to realizing losses short term rather than long term actually materializes only (1) if the taxpayer realizes no offsetting capital gains, either short or long term; (2) to the extent of \$3,000 of offset against ordinary income in any given year, with any current excess carried forward to future years and, therefore, providing tax savings less valuable in present value terms; and (3) if the taxpayer does not realize any future long-or short-term gains to offset any excess capital loss carryforwards. Therefore, the rational taxpayer will want to realize his losses short term rather than long term because they might provide him with greater tax savings, but those tax savings might not materialize, or might materialize only over a long period of time.

3. Fredland, Gray, and Sunley (National Tax Journal, vol. 2, December 1968, pp. 467-78) and Kaplan (National Bureau of Economic Research Working Paper Number 762, September 1981) both document (the former with 1962 data, the latter with 1973 data) that taxpayers hold their appreciated assets longer to qualify for long-term capital gains treatment. U.S. Treasury data for 1977 confirm this conclusion.

