# Fischer Black <br> on TAXES 

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SHOULD YOU WAIT TO REALIZE TAX LOSSES?

You buy a stock, and it goes down. In the light of what you now know about the firm, you are neither bullish nor bearish on the stock. Your tax bracket is high, and you expect it to remain high. If you realize a loss, you may not be able to use it fully this year, but you expect to be able to use it fully to offset capital gains or ordinary income within the next few years. Trading costs are modest compared to the potential tax saving. Should you realize the loss now, or should you wait?

I claim you should almost always realize the loss now. You shouldn't wait till next year. You shouldn't wait till it becomes long term. You shouldn't wait until the year in which you will be able to use the deduction. You shouldn't even wait till the end of the year.

You might wait if trading costs are high compared to the potential tax saving, or if your tax bracket is likely to rise substantially in the future, or if you are bullish on the stock and there are no good substitutes for it. For now, we will ignore these factors. We will assume that trading costs are zero, that your tax bracket is constant at $50 \%$, and that you are currently neutral about the stock.

## Year End Tax Trading

The simplest case is the one in which you are going to sell the stock anyway, and it's near the end of the year. Should you sell the stock now, so that
some or all of the deduction can be taken this year, or should you wait till next year?

The answer, of course, is that you should sell it this year. Assuming that the tax saving will be the same whether you sell it at the end of this year or at the start of next year, you will gain by interest on the taxes by selling this year. If you sell at the start of next year, you may have some saving in estimated taxes, but most or all of your saving is likely to be deferred until the end of next year. Thus you lose a year of interest on most or all of the tax saving.

To be more concrete, let's look at an example. Assume that the stock was bought for $\$ 50$ and is now selling for $\$ 40$. The interest rate is $10 \%$ per year before taxes, or $5 \%$ per year after taxes. Selling the stock will give you a \$10 deduction and a \$5 tax saving.

|  | Se11 | Se11 |
| :--- | :---: | :---: |
| Realized Loss (\$50 - \$40) | Now | Later |
| Tax Saving (50\% of loss) | $\$ 10$ | $\$ 10$ |
| Present Value (at 5\%) | 5 | 5 |
| R | 5 | 4.75 |

Thus the present value of the tax saving is higher if you sell now (at the end of the year) than if you sell later (at the start of the next year).

## Realizing Short Term Losses

Assume now that the choice is between realizing a short term loss now, or waiting a little and realizing a long term loss. If you have already realized
net long term gains, the choice may not matter, but if you will use the loss to offset short term gains or ordinary income, it will. It will be worth twice as much if it's short term.

Let us again assume that a stock bought at $\$ 50$ is now selling for $\$ 40$. We will assume that the deduction will be this year whether the stock is sold now or later. Assume the long term capital gains tax rate is $40 \%$ of the short term rate.

|  | Se11 | Sell |
| :--- | ---: | :---: |
| Row | Later |  |
| Realized Loss ( $\$ 50-\$ 40)$ | $\$ 10$ | $\$ 10$ |
| Tax Saving (50\% or $20 \%)$ | 5 | 2 |
| Present Value (no discounting) | 5 | 2 |

Thus the advantage of selling now to realize a short term loss rather than selling later to realize a long term loss can be great: much greater than the advantage of realizing a loss this year rather than next year.

## Limited Deductions

What if you have no realized capital gains this year? What if you have already realized enough capital losses to offset the maximum amount of ordinary income? Is there any advantage to realizing more capital losses this year?

Yes, there is. First, of course, you gain from realizing short term losses rather than long term losses. But even if the losses will be short term whenever they are realized, there is an advantage to realizing them now.

This is because the cost basis of the stock won't change, while the market value is expected to rise. If you realize the loss later, you will expect it
to be smaller than if you realize it now. If you realize the loss now, and stocks grow as expected, you will end up with a large loss and an unrealized gain in the substitute stock rather than a smaller loss and no unrealized gain.

Even though the loss won't be usable until some future year, the amount of the loss will be greater if it is realized now than if it is realized later. For an example, let us assume that the loss will be realized either this year or next year, but that the tax benefit of the loss will come next year. in either case. Assume that the after-tax interest rate is $5 \%$, and that both the stock you hold and its potential substitute will grow $5 \%$ over the next year.

|  | Sell <br> Now | Sell <br> Later |
| :--- | :---: | :---: |
| Realized Loss (sell at \$40 or \$42) | $\$ 10$ | $\$ 8$ |
| Tax Saving (50\% of loss) | 5 | 4 |
| Present Value (at 5\%) | 4.75 | 3.80 |

It is likely, of course, that the unrealized gain in the substitute stock if we sell now will have a negative value, because we might realize it and pay taxes, or because it is less likely to turn into a realized loss. This will reduce, but not eliminate, the advantage of selling now rather than later when the deduction will only be taken later.

## Early Tax Trading

For similar reasons, it pays to take a tax loss as early in the year as possible. If you wait till the end of the year, you will expect a smaller tax loss. If you act now, you will expect a larger tax loss combineci with an unrealized gain in the substitute stock.

In the previous section, we compared selling at the end of this year with selling at the end of next year, and assumed that the deduction would be taken at the end of next year. Let us keep all the same assumptions, except that we will compare selling at the start of this year with selling at the end of this year, and will assume that the deduction will generate a tax saving at the end of this year in either case.

|  | Sell | Sell |
| :--- | :---: | :---: |
| Realized Loss (se11 at \$40 or \$42) | Now | Later |
| Tax Saving ( $50 \%$ of loss) | $\$ 10$ | $\$ 8$ |
| Present Value (at $5 \%)$ | 5 | 4 |

Thus there seems to be more value in early tax trading than in selling at the end of one year rather than the start of the next year (assuming that the loss can be used in either year).

## Options Analysis

The investor has a series of options with each stock: the option to realize a gain or loss now or to wait. These options are valuable. Normally, the best strategies are to realize a short term loss, or to realize a long term gain, or to let an unrealized gain remain unrealized.

Selling a stock to realize a loss has two benefits. The realized loss is worth more now than later, as shown above. And the options are generally worth more in the substitute stock than in the original stock. For one thing, going to the substitute stock starts the clock over for short term losses. For another thing, the option element is worth more when cost equals market value than when cost is far from market value.

Suppose, for example, that the stock will either go up 12 points or down 12 points with equal probabilities. It starts at $\$ 40$. The change will occur right away, the loss will be realized right away, and the tax saving will occur right away. If the original stock goes up 12 points, it will be above cost (of $\$ 50$ ), and the gain will not be realized. If the substitute stock goes up, its gain will not be realized.

|  | Sell Now |  | Sell Later |  |
| :--- | ---: | :---: | ---: | ---: | ---: |
|  |  | $\underline{B}$ | $\underline{A}$ | $\underline{B}$ |
| Realized Loss (original) | $\$ 10$ | $\$ 10$ | $\$ 0$ | $\$ 22$ |
| Realized Loss (substitute) | 0 | 12 | 0 | 0 |
| Tax Saving (total) | 5 | 11 | 0 | 11 |
| Present Value (total) | $\$ 8.00$ |  | $\$ 5.50$ |  |

The example is extreme in the sense that large moves in the stock are assumed in a short period of time. The example is typical, though, in that it shows a large effect from uncertainty about the future value of the stock. The benefit from starting the holding period over with a substitute stock where cost equals market value can be greater through the options effect than from any of the other effects mentioned above.

Thus the options analysis strengthens all of the other analyses. It makes early realization of a capital loss even more attractive. It appears that a taxable investor should almost always be quick to realize a short term loss, at least under the assumptions of zero trading costs and a neutral prediction for the growth in the stock price over time.

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