## Research Piece: The Fallacy of Long Term Capital Gains By Lou Scinto and Fred Meissner, CMT

With higher tax rates a reality, one of the potential traps for investors could be the desire to wait for long-term gains as opposed to short-term gains. We understand and appreciate this (what investor wants to pay higher taxes?), but the real question should be how much money the client actually receives, net of taxes, after a sale. Another facet of this question is to ask how much risk of continued decline is present after a short-term selling indication is given. One way to evaluate this would be to know the prices at which a short-term and long-term gain would result in the same net profit to a client. Knowing this price would enable advisors and clients to establish risk parameters.

Obviously, neither Registered Advisors, nor The FRED Report, is in the business of giving tax advice. We present this as an idea of general interest and the starting point for further research. Of course, every individual's tax situation is different and we recommend consulting with your tax advisor prior to making significant tax decisions

We asked our friend Lou Scinto (our "resident" mathematical maven) to come up with an equation to measure this and we give the equation below:

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P_{2}=P_{0}+\left[\left(100-R_{s}\right) /\left(100-R_{L}\right)\right] *\left(P_{1}-P_{0}\right)
$$

Where:

- $P_{0}=$ Purchase price of stock
- $P_{1}=$ Price of stock at short term selling price
- $P_{2}=$ Price of stock, if sold for long term capital gain, that gives same net after-tax profit as short term capital gain achieved by selling at $P_{1}$
- $R_{s}=$ total combined (federal, state, etc.) marginal tax rate for short term capital gains (normally the marginal rate for ordinary income), \%
- $R_{L}=$ combined (federal, state, etc.) tax rate on long term capital gains, \%

We used the following website for state income tax rates, as these should be added to the appropriate federal rate:
http://www.thereibrain.com/realestate-blog/2007/10/capital-gains-tax-rates-state-by-state/
We show four examples below using the maximum Federal and Georgia Tax rates.

- CAT. Buy $11 / 20 / 12$ at 83.33 , sell $1 / 25 / 13$ at 95.58 . When does short and long-term gain become equal?
$0 \quad$ Price at which long term capital gain equals short term capital gain $\left(\mathrm{P}_{2}\right)$ is $83.33+(54.4 / 79)$ * $(95.58-83.33)=91.74$ So CAT would have to be sold above 91.74 after $11 / 20 / 2013$ to be more profitable than the short term trade indicated. So far, so good (CAT closed at 91.36 on $3 / 1 / 13$ ).

- AAPL. Buy $4 / 21 / 11$ at 350.70 , sell $4 / 11 / 12$ at 626.20 . When does short and long-term gain become equal?

0 Price at which long term capital gain equals short term capital gain $\left(\mathrm{P}_{2}\right)$ is $350.70+(54.4 / 79)$ * $(626.2-350.70)=540.41$. If you had held off selling until Monday 4/23/12 at 571.70 in order to get a LTCG you would have done better after taxes than you did by selling for a short term gain at 626.20.


- AAPL. Buy on the breakout $1 / 25 / 12$ at 446.66 , sell $4 / 16 / 12$ at 595.25 , when it broke below the low of the previous three weeks. Would it have been better to hold out for a long-term capital gain? This example shows the use of our three week stop loss rule. The example 4 below is what the result would be for selling on a technical breakdown.
o Price at which long term capital gain equals short term capital gain $\left(\mathrm{P}_{2}\right)$ is $446.66+(54.4 / 79) *(595.25-446.66)=548.98$. If you had held off selling until Monday $1 / 28 / 13$ at 449.83 in order to get a long term capital gain, you would still have a gain (barely), but you would have done substantially better by selling on the short term sell indication in April 2012.

- AAPL. Buy on the breakout $1 / 25 / 12$ at 446.66 , sell on the breakdown on $4 / 23 / 12$ at 571.70 . Would it have been better to hold out for a long term capital gain?
o Price at which long term capital gain equals short term capital gain $\left(\mathrm{P}_{2}\right)$ is $446.66+(54.4 / 79)$ * $(571.70-446.66)=532.76$. If you had held off selling until Monday $1 / 28 / 13$ at 449.83 in order to get a long term capital gain, you would still have a gain (barely), but you would have done substantially better by selling on the short term sell indication in April 2012


