The One Percent a Week Stock Trading Program - Part VII

by: Guy R. Fleury

Part VII of **The One Percent a Week** stock trading program is intended to cover finding ways to protect the strategy from itself. In the process, this will change parts of its trading procedures. While at it, I will also push to increase its market exposure with new code aiming for a 100% exposure, presently at about 51%. It might be one of the easiest ways to improve the strategy's long-term outcome since, nearly half the time, the available capital is idle. Putting it to good use should be sufficient to increase total return.

But first, I want to demonstrate that the results shown in previous articles were simply the outcome of the trading procedures used. There was no secret sauce, no hype, just common sense.

You merely participated, half the time, in the market for 14.31 years and were rewarded for it.

Parts I to **VI** of this series covered a lot of ground. I first improved the ***One Percent Per Week*** trading strategy, then leveraged it and even set up a 130/30 market-neutral portfolio. At each step, I raised the portfolio's long-term CAGR to unprecedented heights while at the same time maintaining critical portfolio metrics stable. The demonstration was to first show the strategy's upward CAGR potential before curling it in, at least attempting to reduce the downside effects of short-term trading. If I wanted to push the strategy further, I would know I could.

The **One Percent Per Week** strategy has the singular property that it is doable by anyone with the capital, conviction, and determination to carry it out. To gain confidence, one should make the minor modifications to the original program as presented in **Parts I** and **II** and redo all the simulations. You aim to ensure that applying this trading strategy with its modifications will work for you, not against you.

You already have the results of the simulations from my articles. They should serve as a guide to what the strategy can and cannot achieve. As I mentioned often, the decisions about what you can and cannot do are yours to make. You can implement this strategy independently, even without a computer program, using just a few minutes each week. It's a strategy that can significantly benefit your long-term investment portfolio, putting you in control of your financial future.

Underlying Trading Environment

The first hurdle we encounter in short-term trading is its unpredictability.

Will the price go up or down in the coming weeks, months, or years?

You will have to deal with this quasi-randomness in short-term price movements. You have statistics on past market data, but they do not make probabilities; they only provide statistical data.

For example, Lehman Brothers had a long-term uptrend to a 140-year historical high, and it took only nine months to go bankrupt. The long-term trend completely broke down, while the long-term statistics still showed an extrapolated upside. Plus, you had the famous reversal to the mean, which certainly did not occur for them. The same is true for many other stocks that failed to rebound.

While many may advise to ”follow the trend” with clichés like ”the trend is your friend”, they often fail to provide substantial evidence or methods to define, identify, or categorize this trend or to determine its strength or duration.

When people refer to ’the trend’, they often speak in broad terms that could apply to any time frame. Moreover, the trend they refer to is always based on historical data, with no guarantee of its continuation.

What we truly need is a measure that can indicate both the intensity and direction of a trend. A one-week or two-week trend is not equivalent to a 10-year trend, even if they might temporarily coincide.

A 10-year trend will have little impact on the decision process over the next one to two weeks or so. Therefore, you remain mainly in the dark over the short term about what is coming your way. You are often given 50/50 odds that the price might rise or fall.

You will hear market pundits predicting that the price will rise in the coming week *unless* it falls. And you should be content with that. No matter the outcome, they will say: ”I told you so”. But you would still have faced a near 50/50 probability that your bet would pay off.

All you can do is assume that whatever is defined as a trend might continue. A trend does not come with a guarantee of what is to come. It could provide a probability measure only if we actually could measure it.

The question should be: What is the probability that the stock price will be up by 5% next week? If you give me 50/50 probabilities, your assessment is worth nothing.

The Trading Interval

There is a definite incentive to reduce the trading interval since the long-term average volatility revolves around this long-term trend (see the SPY’s expected 10%

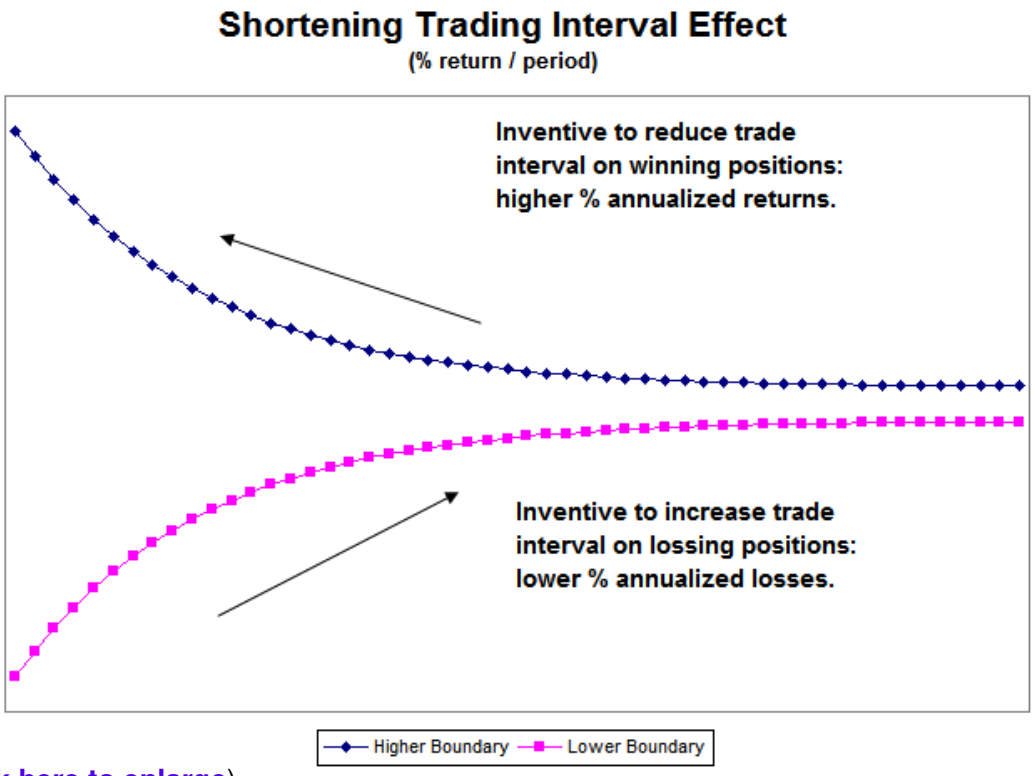
long-term average return).

Based on the standard deviation of returns, the Sharpe ratio has historically been around 0.40. If you get a higher ratio, your portfolio is expected to do better than the market in general. Figure #2 in **Part II** shows a 1.26 average Sharpe ratio over this strategy's 14.31-year test and a beta of 1.46, showing that it is more volatile than the market in general. However, we are playing a 3x-leveraged ETF and should have been at a 3x-beta. For every 3% move in QQQ, we should have a 9% move in TQQQ.

Usually, when you see numbers like this, you have other market folklore in mind, stuff like "if it's too good to be true, it might be, so beware". Yes, I understand that too.

However, you have access to the program, and you can redo all the presented simulations using the same criteria, and you should get the same answers. Your due diligence should be to verify all this by yourself. At least, you should be able to trust yourself.

Figure 1: Trading Intervals



(**Click here to enlarge**)

Nonetheless, those returns have high ambitions for a simple trading strategy that only asks for a Monday's open to take a position. I should not have to say that there will be more Mondays in the future, so your future entry conditions should be met.

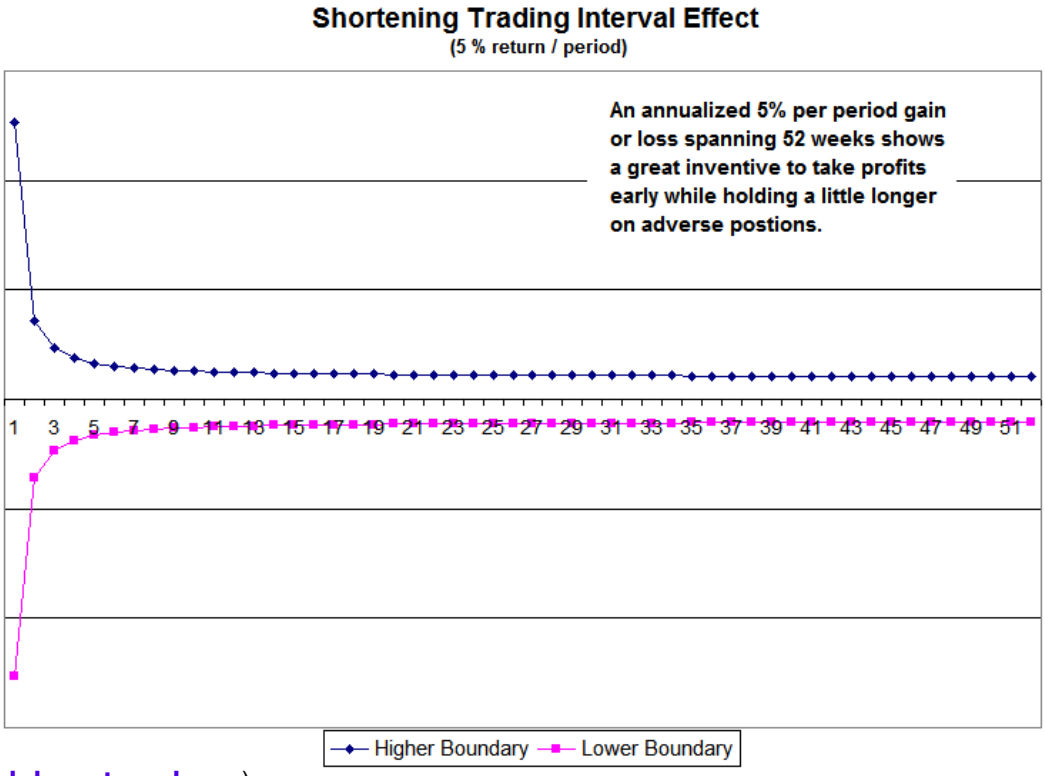
You average 1% per week; it will translate to a 67.7% compounded return should you be able to maintain it. **Part VI** showed we could do it and go even higher without raising key portfolio metrics, one of which was the worst percent loss recorded over those 14.31 years, even though the max drawdown rose. No matter at what level of leverage the strategy was played, you had the same entry prices, the same exit prices, and the same percent profit or loss for each of the 744 trades. Of all those trades, the only thing that changed was their respective bet size. The profit or loss percentages stayed the same even when leverage was applied.

The chart above shows the impact of shortening the trading interval and increasing the annualized returns. The shorter the trading interval, the higher the potential CAGR. The **One Percent Per Week** has for formula: $(1+0.01)^{52} = 1.677$. If you take a position that lasts one week, you have 51 other weeks where you can do the same thing. Simple.

The reason it becomes possible to achieve such results is also relatively simple. It is written in the above formula: you are compounding a small return at a faster pace.

Every 6 months, you get a 10% return; your formula would be: $(1+0.10)^2 = 1.21$, and if you did this every two months, you would get: $(1+0.10)^6 = 1.77$. So, there is a real incentive to shorten the trading interval.

Figure 2: Shortening Trading Intervals



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The problem is: can you get that 10% on the shorter interval? And if not, how close to it can you get?

Figure #2 shows an annualized 5% return per period, the same as in Figure #1 above, except that it starts at week one.

The general market can easily offer you its long-term expected average return: $\mathsf{E}[\bar{r}_m] = F_0 \cdot (1 + 0.10)^1 = 1.10 \cdot F_0$. But your interest should be for the long term: $\mathsf{E}[\bar{r}_m] = F_0 \cdot (1 + 0.10)^{20} = 6.73 \cdot F_0$ and even over a longer interval $\mathsf{E}[\bar{r}_m] = F_0 \cdot (1 + 0.10)^{30} = 17.45 \cdot F_0$.

For any single year, that average 10% expectation could be far from the mark, but not so much over the long term.

Increasing the average long-term return requires more than the long-standing expectation of the long-term expected market average.

But based on the equations presented below, you do not have much of a choice. This equation will have to prevail: $F(t) = F_0 \cdot (1 + \bar{g})^t$. And since you are dealing with future stock prices, $\bar{g}$ has to include the expected market average: $\bar{g} = \mathsf{E}[\bar{r}_m] + \alpha$ and make space for the portfolio management skills (alpha) you will bring to the game.

The nature of that alpha is not defined, but it is needed should you want to exceed the expected long-term market average. You are not given much of a choice. You either generate that alpha or not. It is with that alpha that you are going to exceed that expected long-term market average. By how much, that is up to you.

The alpha can be positive, just as it can be negative. If negative, you will underperform market averages. With a negative alpha, your efforts will be detrimental to your portfolio's growth when you could have done better by holding SPY for the duration.

The trading interval and potential return are part of your choices, as shown in **Part V**. However, if you use a 20 or 30-year timeframe, you should use trading methods consistent with that timeframe, just like dealing with one-week positions.

Your interest breaks down to what can happen in a succession of one-week intervals. Over 20-30 years, you will have 1,040-1,560 such intervals to consider. Each interval will request a trading decision.

The **One Percent Per Week** strategy attempts to convert short-term upside volatility to cash.

The strategy does not know what level of volatility or how strong it might be, but it will try to take a chunk of it as it goes by. Not as if planning for it or trying to

forecast the coming volatility in any way, but simply by putting barriers in its way as trade-triggering events.

In this case, stop-profits and time-out procedures are put in place. The strategy is also time-limited to exploit its surrounding volatility.

For you, the objective becomes seeking a higher annualized return simply because you shortened the trading interval. It justifies the use of the future value equation presented above.

The price volatility won't change because you are in the game. It will just be as erratic as before, with or without you. Your impact on the market is minimal, if not nonexistent. You are just one in the millions and millions of participants wishing better returns on their invested capital.

You are playing a game where all players have their respective decision-making processes. Players have multiple reasons to get into a stock, hold it, and get out at a time of their choosing. Their collective actions move prices around.

All you can see is the result of their actions, not their reasoning or intent, whether over the short term or otherwise.

Being Consistent Matters

You need to be consistent with the trading interval you are concerned with and deal with the available information prior to your trading period of interest.

Therefore, you need to determine the price volatility and methods of converting that volatility to cash. You had 10+ years of QQQ historical volatility before the creation of TQQQ.

From the start, TQQQ was designed to generate daily returns that were 3x larger than QQQ. And TQQQ will mimic QQQ's every move.

In your trading, you are not just a participant but also an observer of price variations. This role empowers you and puts you in control of your trading strategy. You are actively managing your ongoing inventory of shares, even if it is for up to a week or two.

Your potential profit or loss has a time limit. If prices do not rise enough to reach your profit target by the end of the trading interval, those shares will be liquidated at a loss or with whatever profit they managed to keep.

For example, **The MoonPhaser** stock trading script had a 2-week trading interval. The program liquidated all the shares held every two weeks. Yet it outperformed

the market over the last 20 years. The same thing was shown using the weekly rebalancing of the 100 stocks belonging to the QQQ ETF, a proxy for the NDX index. That too, over a 20-year period, outpaced the SPY, which we can view as a surrogate for the market average (see **Part III**).

Time constraints are a major point in the series of portfolio equations presented in prior articles. Here are those equations again:

$$F(t) = F_0 \cdot \left[\left(1 + \frac{f_w}{1 - (f_w + c_w)} \right)^{W + \Delta z_w} \cdot \left(1 - \frac{f_l}{1 + (f_l + c_l)} \right)^{L + \Delta z_l} \right] \tag{1}$$

$$F(t) = F_0 \cdot (1 + \bar{g})^t = F_0 \cdot \prod^{N} (1 + r_i) = F_0 \cdot \sum^{N} (b_i \cdot r_i) = F_0 + N \cdot \bar{x} \tag{2}$$

All the equal signs hold in the above equations, including $F(t) = F_0 \cdot (1 + \bar{g})^t$ where time is clearly expressed.

No matter how we consider the other equations, they must execute within that allocated time, even though time is not part of their formulations. In this case, N is also a monotonic equation increasing by one every week.

Your question should be: how much return can I get over the next week trading this or that?

If the yearly market average is about 10%, you should expect much less over a single week. For example, $10\% \div 52 = 0.0019$ or 0.19% per week. To outperform the long-term market average, you will need more than that. Yet, with this strategy, you aim for five times that annual return. Technically, only a little more.

As expressed in prior articles of this series, the **One Percent Per Week** strategy aims to realize this 1% per week using the 3x-leveraged TQQQ ETF. This is much more than a 10% return, as expressed earlier.

The "*one percent per week*" is the quest, the objective. However, you want this average of 1% per week for the first year and for those that will follow. If you intend to put your time into this, you want it to be rewarding.

You cannot have a 1% return every week, but you could average close to that objective. It could be considered enough and as worthy.

You would not be interested in this strategy if you could do more. If you are doing less, you might not feel secure enough to undertake such a strategy due to TQQQ's leveraging stance.

You have learned to fear leveraging, just as you learned early to avoid martingales.

You do not want to put it all on the line and hope for the best. You want assurances that if you do this, it will work.

As described in prior articles, the strategy showed what it can do. We went from $400,000 and even less to over $60 million just by changing a few characters in the program and thereby changing its trading philosophy.

I made the program reject the discount request it was making to instead ask for a sign of strength first and raised its profit target from 1% to 7%. It was sufficient to increase the strategy's CAGR to 52.89% with an exposure of only 51.22% (see Figure #6 in **Part I**).

The weekly 7% profit target, if achieved for those 52 trades, would have an annualized return of 3,272% while the 8% target would reach 5,370%. Those are extraordinary returns, to say the least.

Yet, the **One Percent Per Week** version 5.0 of this strategy executes many of these trades (about 94, including those with even higher returns). All by themselves, they raised the overall averages.

The following table displays the annualized returns and the number of trading days per period. The **One Percent Per Week** strategy is highlighted with its 5-trading day intervals, objective, and profit targets.

Table 1: Trading Intervals And Returns

# Trading Days	Periods per year	Percent Per Period									
		1.00%	2.00%	3.00%	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%
5.0	52	67.77%	180.03%	365.09%	668.66%	1164.28%	1969.69%	3272.53%	5370.60%	8734.42%	14104.29%
5.2	50	64.46%	169.16%	338.39%	610.67%	1046.74%	1742.02%	2845.70%	4590.16%	7335.75%	11639.09%
5.8	45	56.48%	143.79%	278.16%	484.12%	798.50%	1276.46%	2000.25%	3092.04%	4732.73%	7189.05%
6.5	40	48.89%	120.80%	226.20%	380.10%	604.00%	928.57%	1397.45%	2072.45%	3040.94%	4425.93%
7.4	35	41.66%	99.99%	181.39%	294.61%	451.60%	668.61%	967.66%	1378.53%	1941.40%	2710.24%
8.7	30	34.78%	81.14%	142.73%	224.34%	332.19%	474.35%	661.23%	906.27%	1226.77%	1644.94%
10.4	25	28.24%	64.06%	109.38%	166.58%	238.64%	329.19%	442.74%	584.85%	762.31%	983.47%
13.0	20	22.02%	48.59%	80.61%	119.11%	165.33%	220.71%	286.97%	366.10%	460.44%	572.75%
17.3	15	16.10%	34.59%	55.80%	80.09%	107.89%	139.66%	175.90%	217.22%	264.25%	317.72%
26.0	10	10.46%	21.90%	34.39%	48.02%	62.89%	79.08%	96.72%	115.89%	136.74%	159.37%
52.0	5	5.10%	10.41%	15.93%	21.67%	27.63%	33.82%	40.26%	46.93%	53.86%	61.05%
260.0	1	1.00%	2.00%	3.00%	4.00%	5.00%	6.00%	7.00%	8.00%	9.00%	10.00%

(**Click here to enlarge**)

A shorter trading interval has tremendous potential if only we could develop trading strategies to extract such returns.

Regardless, we have to stay within the realms of reality.

The **One Percent Per Week** did not achieve its *one percent per week* goal, but it did manage to obtain a 14-year "average" of 1% per week. It got a lot of help from the

trades having reached their profit targets.

Some might consider those results unrealistic, yet anyone could redo those simulations and verify the numbers for each test over the last 14 years or so using the TQQQ market data.

If you manage a strategy that gives you 10% per month, you should reach $(1 + 0.10)^{12} = 3.14$. That is 314% your initial stake for the first year. It would take 12 years to achieve the same result using SPY, and that is if SPY maintained its long-term average ($\sim 10\%$).

The above table suggests that reducing the trading interval has considerable merit as long as it is reachable and doable.

If a stock fluctuates by 1% on average, it might not reach your 10% profit target that often and thereby not be able to provide you with that 10% monthly return as requested by your trading strategy. In **Part VI**, we removed the profit target altogether, and the overall return dropped by -80%. That was equivalent to raising the profit target to 25%, where none of the trades could reach it.

Again, we have to stay within the boundaries of reality. That is why you do those simulations: to see if a strategy is feasible. If a strategy's potential return was not achievable using past market data, it may not be achievable using future data either.

We still need to analyze the environment in which we trade. It is not only for its potential but also its drawdowns.

Should we fear the once-in-a-while outlier if it does not impact our portfolios? For instance, should we fear a black swan, such as the flash crash of May 2010 when there was nothing we could have done to avoid it, and if we had done nothing about it, it would not have had such a dramatic impact as it did on that day.

What matters is when the actual loss is realized since you will have to make it back.

If we can reach the 7% profit target, we can also visit its counterpart: the drawdown. If we annualize the average 3.37% weekly volatility of QQQ or of TQQQ which nears 9.94%, we would get based on that data: $(1+0.0337)^{52}-1 = 460\%$ and $(1+0.0994)^{52}-1 = 13,707\%$ respectively.

Those are extreme annualized volatility measures, which are in line with the numbers in Table #1.

The worst part is that those numbers are averages; you will often find higher, just as you will have lower numbers. Nonetheless, the 9.94% average weekly volatility for TQQQ is much higher than non-leveraged ETFs.

Having a high short-term volatility measure such as TQQQ does not mean that it is not there or that it is not possible since it is. It is what we can observe every day of the week.

Figure #1 suggests that you should reduce the trading interval to increase your annualized CAGR. That is further supported by Table #1, where calculations were made by period and return.

On the other hand, reducing the impact of drawdowns would be less harmful if the trading interval was increased, giving it more time to recuperate some of its decline and reduce its annualized impact (this was described in **Part VI**).

You have a conflict between those two objectives: shortening the trading interval to increase returns and increasing it to reduce the impact of drawdowns. You cannot have both at the same time. We need a compromise.

Related Papers and Articles:

The One Percent a Week Stock Trading Program: **Part V**, and **Part VI**

The One Percent a Week Stock Trading Program: **Part III**, and **Part IV**

The One Percent a Week Stock Trading Program: **Part I**, and **Part II**

The Long-Term Stock Trading Problem: **Part I**, and **Part II**

The MoonPhaser Stock Trading Program

Anticipating A Stock Portfolio's Long-Term Outcome

The Big Open Project

Sitting On Your Bunnies Might Be Your Best Investment Yet

Self-Managed Retirement Funds

Make Yourself A Glorious Retirement Fund

The Age Of The Individual Investor

Use QQQ - Make the Money and Keep IT

Take the Money and Keep it – II