March 13, 2019

Friends,

This letter lays out my goals, measuring stick and time frame. It also explains my strategy.

Expectations

University teaches students that beating the S&P 500 is impossible except for a lucky few. That it is unwise to invest yourself or with actively managed funds. Well, challenge accepted. My target is 20%+/year, doubling SP500's average return. This will noticeably outpace the S&P 500 over the medium term. I will update results every quarter.

There will be a lot of variance. Being 10% ahead after a quarter doesn't mean I made especially great decisions. Neither does being 10% behind mean I traded poorly. Most people severely underestimate short term luck.

A reasonable sample size for my overall strategy is 3 years. Adjusted for margin, longs should collectively earn more than the SP500. Shorts should at least break even.

It will be hardest to beat the index during bubble markets. Many of the best investors fell behind during the dotcom bubble. Why? Because they didn't invest their client's money into bubble stocks, which briefly had extreme returns. Those were probably nerve-wracking years. However, in the end they didn't ride the bubble down and came out ahead.

Negative financial events cause twice as much distress as positive ones give pleasure. These events will stand out. Please be patient and continue to trust my judgment even during periods of bad luck. In fact, these will often be the moments with the best opportunity.

Strategy

I worked two market anomalies into an overarching strategy.

The first is the low volatility anomaly. This <u>paper</u> shows that less volatile companies have higher returns. This is powerful because lower volatility allows more leverage. During the market collapse of 2008 the <u>most volatile quintile of mid-cap stocks lost ~60%</u> while the least volatile <u>lost only ~30%</u>. A basket of low-to-mid volatile companies might have lost just 40%.

The second anomaly is that <u>small companies have higher returns than large ones</u>.

Combined, there is an interesting pattern:

U.S. stocks divided into a 5x5 matrix based on size and trailing volatility.

Long	Annualized Returns (July 1963 - December 2018)				
	Lowest		Short		Highest
-	Variance	2nd Lowest	Median	2nd Highes	▲ Variance
Smallest	16.73%	17.54%	15.58%	10.48%	-2.76%
2nd Smallest	15.20%	16.10%	15.64%	12.99%	3.43%
Median	13.43%	13.71%	14.84%	13.18%	5.76%
2nd Largest	12.69%	13.00%	12.96%	12.02%	6.90%
Largest	9.72%	10.87%	10.15%	8.95%	7.81%

Assume,

100% long earns 15% 50% long earns 7.5% - 1.5% interest = 6% 50% short breaks even

That's a 21% return.

The ratio of longs to shorts will shift. At an all time high I will stick more rigidly to the 150/50 target. After something like last December's correction that might switch to 175/25.

Example: Say you have \$100k. What happens when the SP500 goes down 40% with a 150% long/50% short strategy? The 50k shorts go down 60% because they're more volatile and you win \$30k. Whereas the \$150k longs go down 40% because they're less volatile and you lose \$60k. Overall you lost just 30k.

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Thanks for investing with me. I'll do my best to make you lots of money,

David