



My **Alpha Power Trading Methods**

Thinking Differently

Improving Portfolio Performance

Guy Roland Fleury

The central idea behind this methodology is to trade market cycles over a long term stock accumulation program using the excess equity buildup instead of letting it go to waste.

As a consequence, greatly improve overall portfolio performance.

Two Main Objectives:

- Accumulate shares as much as possible
- Trade over the accumulation process

All within portfolio limitations:

- available capital
- avoid going bankrupt
- available trading opportunities

Basic Notions.

Investment portfolio management theories abound. But there has been little change over the last 50 years. We have to dare challenge some established barriers like the concept of an efficient frontier, the Sharpe ratio or the efficient market hypothesis.

If we do not jump over these “barriers”, how could we do better than hitting those “walls”?

But these so called “barriers” can easily be jumped over using administrative trading procedures and profit reinvestment policies.

This is what I will try to demonstrate in this presentation.

The Pay-Off Matrix: $\Sigma(\mathbf{H} \cdot \Delta\mathbf{P})$

- **H**: Inventory of shares held in the portfolio
- **$\Delta\mathbf{P}$** : Price variations from period to period

The pay-off matrix is the most simple expression to represent all the generated profits using any trading strategy over any investment period.

Using Excel: It's like multiplying two columns and summing the result. And then do this for all the stocks in the portfolio.

The Buy & Hold.

Using the pay-off matrix, expressing the Buy & Hold investment strategy is as simple as:

$$\Sigma(\mathbf{H} \cdot \Delta \mathbf{P})$$

Where each column in \mathbf{H} (each stock) has the same value as the initial number of shares bought for that particular stock. Over the whole trading interval the quantity of shares held remains the same. And therefore, the pay-off matrix does represent the cumulative sum of all profits generated by the Buy & Hold strategy.

For example, using the 100 stocks of the S&P 100 over the last 20 years using daily price changes would result in a pay-off matrix of 100 stocks x 5,000 trading days (some 500,000 decision points). And holding the 100 stocks of the S&P 100 over the last 20 years would have produced the same result as holding the index.

Expressing Portfolio Profits:

The pay-off matrix* can represent any kind of trading strategy over any trading interval. It can summarize the whole trading history of a portfolio.

The price variation matrix ΔP is the same for everyone. Again taking the S&P 100 example, the price change every day for every stock in the list is out of one's control. You may try to outguess where it goes but it won't change where it is going.


What remains to improve performance is the holding matrix itself H . It is the inventory management, the position sizing algorithms where one can exercise control.

* Schachermayer's pay-off matrix: $\Sigma(H \cdot \Delta P)$
 H and ΔP can represent 100 stocks by 5,000 trading days matrices.

Fig. 1: A Trading Strategy (H).



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.



To improve performance, one has to design a better holding function, an enhanced holding matrix: H^+ . It will have for mission to outperform the Buy & Hold strategy.

Fig. 2: An Enhanced Trading Strategy (H⁺).



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.

$$\Sigma(\mathbf{H}^+ \cdot \Delta \mathbf{P}) > \Sigma(\mathbf{H} \cdot \Delta \mathbf{P})$$

The enhanced holding matrix \mathbf{H}^+ can easily outperform.

This inventory matrix \mathbf{H}^+ tries to meet 2 objectives: accumulate shares for the long term while at the same time trade over market cycles to generate cash to accumulate even more long term shares. This results in the following equation:

$$\mathbf{H}^+ = \mathbf{H}(1 + \mathbf{g}_i + \mathbf{T}_i)^{(t-1)}$$

where \mathbf{g}_i is the reinvestment policy rate and \mathbf{T}_i is the trading contribution expressed as a return rate equivalent for each stock in the portfolio.

In the end, it is really how the investment game is played that matters.

Alpha Power Trading Methods

$$\Sigma[\mathbf{H}(1 + \mathbf{g}_i + \mathbf{T}_i)^{(t-1)} \cdot \Delta\mathbf{P}] > \Sigma(\mathbf{H} \cdot \Delta\mathbf{P})$$

The more you increase excess equity usage (\mathbf{g}), the more you execute profitable trades (\mathbf{T}), the more the portfolio profits increase at an increasing exponential rate.

This holding matrix \mathbf{H}^+ will be responsible for generating *alpha*, not only positive *alpha*, but positive exponential *alpha*. Something unheard of in the investment industry.

Like all obvious, radical ideas, at first it was rejected. Then ridiculed. But one day, it will be common sense and no one will be able to remember why anyone ever thought differently.

Fig. 3: Increasing Bet Size Will Increase Performance (2H+).



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.

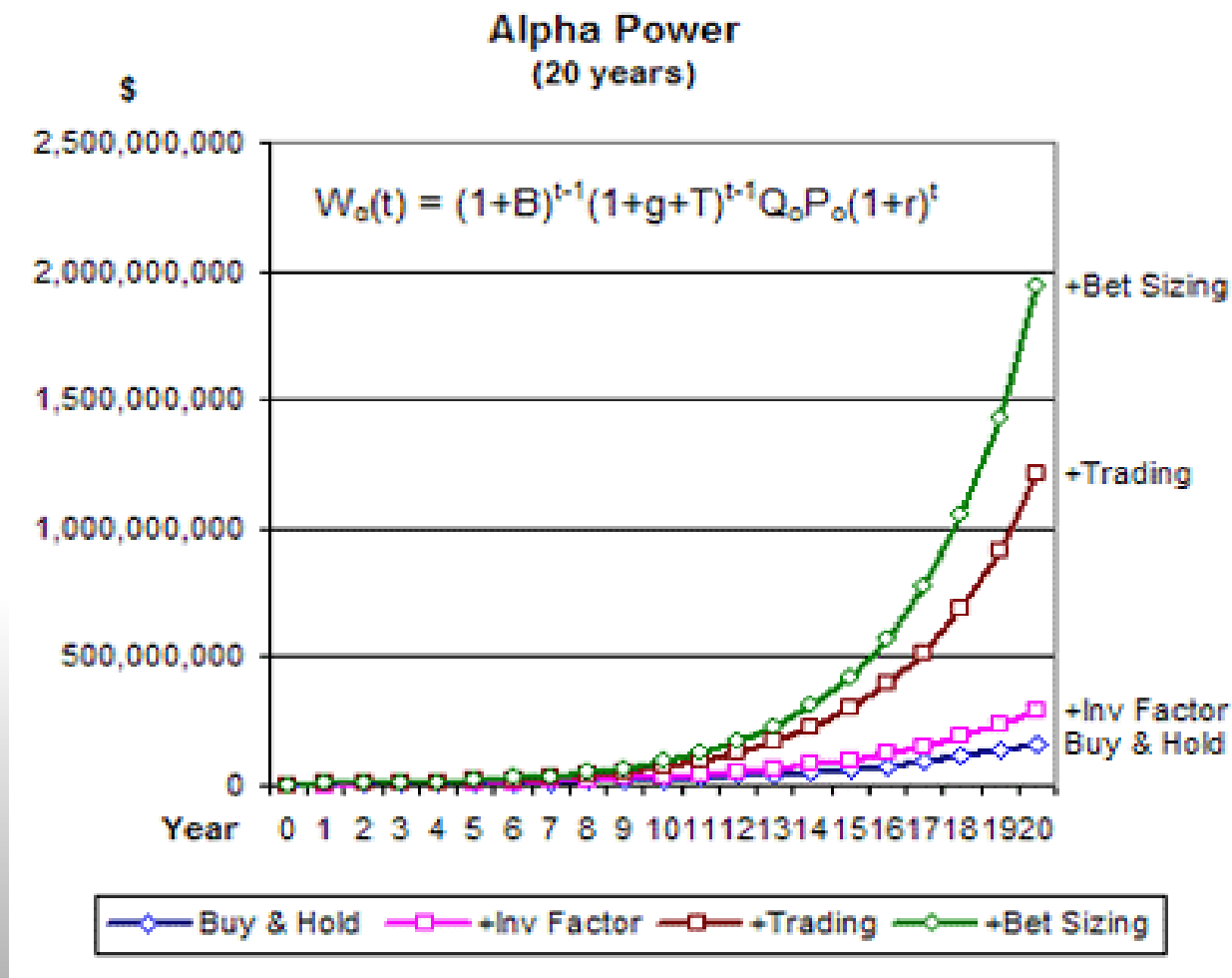
Fig. 4: Trade Acceleration Will Also Increase Performance.



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.

Alpha Power Trading Methods

By applying a long term perspective to the trading game, one can easily outperform the traditional Buy & Hold strategy. Not by replacing it with trading, but by enhancing it: adding share accumulation to the trading mix to become a better overall investment strategy.



Alpha Power Trading Methods

The Alpha Power Trading methodology can be applied to portfolios with hundreds of stocks. All controlled by their respective holding functions.

$$\Sigma[\mathbf{H}(1 + \mathbf{g}_i + \mathbf{T}_i)^{(t-1)} \cdot \Delta\mathbf{P}] > \Sigma(\mathbf{H} \cdot \Delta\mathbf{P})$$

Each stock would behave differently; generate short, mid and long term trades depending on their own paths. Funds would be allocated to the strongest stocks, which with rising prices, gain a greater ability to accumulate more shares. Thereby generating more short term profits to accumulate even more shares. It is this feedback reinforcement loop that allows trade acceleration and higher performances.

Advantages:

- **A Less Volatile Equity Curve**
An observed side effect as time progresses for the simple reason that a major portion of equity might be in cash.
- **Share Accumulation**
With time, the accumulated shares will surpass the number of shares that would have been acquired by the traditional Buy & Hold strategy.
- **Cash Accumulation**
The trading process will return cash to the account. And all that cash is not necessarily used to acquire more long term shares.
- **Higher Performance**
This trading strategy has an exponential *alpha* generation and will show an increasing equity curve.

Alpha Power Trading Methods

The Alpha Power Trading methods seeks to accumulate shares for the long term and will not hesitate to accept some short term profits along the way on its journey to over performance. Having a long term view of stock appreciation, all it seeks are stocks having a long term positive expectancy.

The next two slides were produced one minute apart using the same program as the one applied to the 4th AAPL chart. The purpose was to show that AAPL was not a fluke or an optimized, curve fitted example. If the program was such, it should crumble, fail or break down when applied to other stocks.

Fig. 5: A Reward System For Good Trading Behavior.



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.

Fig. 6: Share Accumulation Remains The Primary Objective.



Test duration: 1,500 trading days (5.83 years). Starting capital: \$100,000.

Alpha Power Trading Methods

The above two charts are the result of a trading philosophy based on the mixture of administrative trading procedures and profit reinvestment policies.

It is by applying these trading methods that one can achieve over performance way beyond the Buy & Hold. Not by replacing the Buy & Hold by trading, but by adding trading and a share accumulation process to the mix.

The trading strategy is viewed as a whole, a unique portfolio matrix H^+ which seeks to accumulate shares in each stock for the long term and will accept short term trading profits to accumulate even more shares along the way on its journey to over performance.

Alpha Power Trading Methods

Using the same long term stock selection in a long only scenario, the methods to increase performance are limited.

$$NP_{ol} = \sum^n [H_{ol}(1 + g_i + T_i)^{(t-1)} \cdot \Delta P_{ol}]$$

$$NP_{cl} = \sum^n [H_{cl}(1 + g_i + T_i)^{(t-1)} \cdot \Delta P_{cl}]$$

You can increase the number (**n**) of opened long positions NP_{ol} , and the number of profitable closed long (cl) positions. You can also increase the spread (ΔP) of those profitable trades. The Alpha Power Trading methodology tries to do both with the added feature of increasing the inventory at an exponential rate.

Alpha Power Trading Methods

It is by designing better trading strategies, better trading procedures; trying to combine the best of various methods with a long term view of portfolio appreciation that these methods can outperform.

It becomes a trading philosophy where investing is more than a simple Buy & Hold strategy. The Buy & Hold is transformed into an Alpha Power Trading strategy:

Accumulate, Trade & Hold more.



The Buy & Hold is not dead.

It is not even asleep.
It only needs a little boost.
An Alpha Power Trading boost.

Alpha Power Trading Methods

Author: Guy Roland Fleury

- Web page: Alpha Power Trading
- E-mail: guyrfleury@gmail.com

Main Publications:

- **Alpha Power: Adding More Alpha to Portfolio Return**
- **Jensen Modified Sharpe Ratio**
- **Alpha Power: The Implementation**

Main Articles:

- **Alpha Power Overview**
- **Trend or No Trend**
- **ITRADE Formula**
- **... and more**