

Increasing the No. of Open Positions in SPA3 Investor Equal Weighting Portfolios

This paper refers to the research that Gary Stone presented at an eUGM on May 17th, 2018.

Once a decision is made to increase the number of simultaneously open positions in a SPA3 Investor Equal Weighting portfolio then it just makes sense to action this as soon as possible.

There are a number of ways that this could be achieved for an existing SPA3 Investor EW portfolio. Here are the two main approaches:

1. Wait for exit signals to occur for currently open positions, and then enter new positions when entry signals occur with the smaller position size.
2. Lighten existing position(s) whenever a new entry signal occurs or if there are currently stocks that are open trades and their current price is below the Action Price.

Neither approach is incorrect.

For the SWS SPA3 Investor EW Public Portfolios, SWS has decided to use the second approach.

The timing of doing this has been determined objectively by:

1. As soon as possible after the eUGM in which the research was presented as to how many open positions a SPA3 Investor EW portfolio should have, depending on capital invested, returns, exposure and average number of trades per annum.
2. When the Investment Plans were updated and ready for publishing.

The date chosen for doing this was May 23rd, 2018.

As of this date the following SWS real-money Public Portfolios increased the number of open positions, and hence decreased position sizes, as follows:

1. ASX EW Stocks: from 5 to 7.
2. Iain's Investment Plan: from 5 to 9.
3. USA EW Stocks: from 6 to 11.

The arithmetic used to calculate the new smaller position size is as follows:

1. Calculate the new absolute position size based on The Formula below.
2. Calculate the quantity by which to lighten a particular position by maintaining the existing percentage profit or loss. See below.
3. Lighten the largest open profit position first to reduce the value-at-risk of the overall portfolio, and then the next largest profit position, and so on.
4. Open any new positions that are either a new entry signal or an open SPA3 Investor trade where the current price is less than the Action Price.

The Formula

The essence of the formula is to maintain the relative open profit(loss) for the currently open trades and to redistribute a pro-rata'ed amount of profit (loss) to the additional new positions that will be added and opened in the EW portfolio.

To achieve this, use the following process, as per the example.

Current Status - SPA3 Investor - ASX Equal Weighted Stocks

Capital Summary

Portfolio Name: SPA3 Investor - ASX Equal Weighted Stocks Portfolio Value: \$111,503.87
Prices as of: Wednesday, 23 May 2018 Commencement Date: Friday, 1 January 2016

Summary	Totals
Open Trades	5
Market Value	\$111,433.65
Profit Total	\$13,650.50
Allocated	\$97,783.14
Available	\$70.23

Invested: 99.93%

Assume:

1. Profit Total = \$13,650.50
2. New No. of Positions = 7
3. No. of Additional New Positions = 2
4. Allocated = the total capital invested in the open trades when they were initially opened = \$97,783.14.
5. Available = Cash on Hand = \$70.23.

Pro-rata'ed open trade profit for new positions, or POTP = (Profit Total ÷ New No. of Positions) * No. of Additional New Positions.

Using the above data:

$$\text{POTP} = (13,650 / 7) * 2 = \$3,900.$$

The New Position Size (NPS) is then calculated as follows:

$$\text{NPS} = (\text{Allocated} + \text{Available} + \text{POTP}) / 7 = \$14,536$$

Calculating the Lighten quantity for currently open positions

1. Calculate what the Market Value should be for the NPS for a currently open position by maintaining the Profit % for the open position.
2. Calculate the new quantity of shares for the currently open position.

3. Subtract the new quantity of shares from the current quantity of shares.
4. This is Lighten quantity.

Example:

Assume that the current Market Value for a particular position is \$27,904 which is a 37.17% profit. Assume the current share price is \$182.38 and the current quantity of share held is 153.

This open trade's open position will need to be reduced to $\$14,536 * 1.3717 = \$19,939$.

The quantity will need to be reduced to $\$19,939 \div \$182.38 = 109$, which means that 44 will need to be lightened.