The Value Averaging Portfolio Methodology

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The purpose of this document is to outline the framework as to how an investment portfolio can be created and implemented based on the Value Averaging (VA) investment strategy. The VA investment methodology is an event driven mechanical system that is mathematically calculated using computer software to determine the dollar amount to invest or sell periodically.

The concept of Value Averaging is not new. It was first written about by former Harvard Finance Professor and Nasdaq Chief Economist, Dr. Michael E. Edleson, back in 1988. Dr. Edleson went on to publish a book dedicated to the topic of Value Averaging in 1993. His book provided significant detail on Value Averaging and specifically the research which supports the fact that **Value Averaging can produce higher investment returns as compared to other investment approaches**. There have also been several independent detailed studies completed by various academics such as, Professor Paul S. Marshall (Journal of Financial and Strategic Decisions, 2000) and by Professors Leggio and Lien (Journal of Financial Planning, 2003) comparing Value Averaging to other investment strategies. Research reports outlining this investment strategy can be found on-line at www.valueaveraging.ca.

Portfolio Framework

1. Determine Portfolio Objective and Model
2. Identify the Market Sectors
3. Identify Securities in each sector for the Portfolio
4. Determine Asset Allocation and Weight Portfolio to Maximize Returns and Yield
5. Back-test using the Value Averaging software system
6. Use Value Averaging to implement the Trading Plan
7. Monitor and adjust to meet Portfolio Objective

1. Portfolio Model

- Target portfolio growth of X% annually
- Exchange Traded Fund (ETF) and/or Index Fund holdings
- Maximum 9 asset classes and 16 securities (sub assets)
- Trades done Monthly – not daily
- Lower volatility and Low risk

2. Identify Market Sectors

This Portfolio methodology represents exposure to **9 asset classes** and up to **16 securities (sub assets)**. This gives significantly greater flexibility to create a portfolio that is unique and one that can withstand any market condition. The asset classes, and the Portfolio Building Blocks, are shown below:

CORE					EXPLORE			
Cash	Long Bonds	U.S. Stocks	Foreign Stocks	Real Estate	Natural Resources	Commodities	Emerging Markets	Technology

These asset classes were selected based on extensive research showing that they provide the greatest range of diversity possible. In other words, each tends to act differently in response to the same market catalysts and there should always be at least one, or more likely, several, that perform well in any market condition. They were also chosen because Value Averaging works better with more volatility in a portfolio.

An optional choice for each Building Block is to simply not include it in our portfolio. We would do this if our analysis does not give you a clear signal of whether an asset type or market will do well in the future. In which case we simply put it in a "Watch List" that will alert us when significant prices changes occur. We can then examine it again to see if it still is a good candidate for our portfolio.

3. Identify Securities for the Portfolio

The VA portfolio uses Index Funds or Exchange Traded Funds (ETFs) for each asset class.

● Numerous studies indicate that many active managers underperform their index-based benchmarks

● They cover a wide range of market segments, investment styles, sectors and industries

● Provide transparency of underlying fund holdings

● Offer potential tax-efficiency due to low turnover

● Feature low expenses compared to actively managed funds

For each market sector we narrow the list of ETF's or Index funds down to 5 or 6 names. We then compare them and choose the one that we think will perform the best. There are enough funds that give us plenty of flexibility to design a portfolio that meets our investing profile and virtually any market condition.

Category		INTERNATIONAL STOCKS						
Security	Symbol	Average Return %			Risk		MER %	
		1 year	3 year	5 year	Std Dev	Yield %		
Wisdom Tree World x us	DNL	4.53	3.95	0.50	15.30	3.06	0.60	*
Vanguard FTSE All World x US	VEU	1.68	-1.94		16.17	0.01	0.22	
iShares MSCI x US	ACWX	0.89	-3.12		15.36	2.65	0.35	
SPDR S& P World x us	GWL	2.40	-2.58		16.44	3.00	0.34	
Vanguard Total World	VT	3.60	-1.63		14.81		0.25	
Averages		2.14	-2.32	0.50	15.70	1.89	0.29	

Depending on the size of the fund, certain ETF's are eliminated even if they passed our criteria simply because they do not have enough trading volume on a daily basis.

The following table shows an example ETF for each of the nine portfolio building blocks (a Money Market Fund - MMF – can be used for cash).

CORE					EXPLORE			
Cash	Long Bonds	U.S. Stocks	Foreign Stocks	Real Estate	Natural Resources	Commodities	Emerging Markets	Technology
MMF	AGG	RPG	VEU	VNQ	IXC	DBA	DEM	PNQI

By using ETFs and targeted Index Funds, searching for and analyzing individual securities or fund styles is eliminated, therefore fund manager bias is eliminated. Via total-market investment vehicles we can own hundreds of stocks and bonds in the portfolio even though we will only ever have a maximum of 15 investments. Company risk is virtually eliminated and the entire investing process becomes exponentially simpler!

4. Back Testing using the Value Averaging Methodology

Since the VA investment method is an event-driven (mechanical) system that is mathematically driven, we have developed a web-based calculation / analysis engine that allows us to back-test the Value Averaging (VA) investment strategy, over any time frame, using historical data from any North American Stock, ETF or US based mutual fund. We have tested this trading method going back as far as 15 years and it works very well, in fact the more volatile the security the better the strategy works.

Once securities have been selected for the portfolio we run them through our analysis engine to see how they would have performed historically if we invested in them using the value averaging method. We then use this information to determine the initial weighting of the portfolio being created.

5. Determine Asset Allocation and Weight Portfolio to Maximize Returns and Yield

Once the securities for the portfolio have been selected, capital is then allocated among the nine asset classes. The following table is a sample portfolio design with allocations.

PORTFOLIO CONSTRUCTION

Portfolio Name	VALUE AVERAGING - Aggressive Growth Strategy

Portfolio Size	$ 1,000,000
Core Segment Allocation	60.00%

CORE - Segment Allocation	$ 600,000	60.00%

Security	Sector	Symbol	Expected Return	Dividend Yield	% of Portfolio	Amount Invested	Return Contribution	Yield Contribution
Cash	Cash		0.00%	0.00%	20%	$ 200,000	0.00%	0.00%
Vanguard REIT	Real Estate	VNQ	8.50%	0.00%	5%	$ 50,000	0.43%	0.00%
SPDR International Real Estate	Real Estate	RWX	8.50%	0.00%	5%	$ 50,000	0.43%	0.00%
Vanguard FTSE All World x US	Int'l Stocks	VEU	10.00%	0.00%	15%	$ 150,000	1.50%	0.00%
S&P Small Cap 600	U.S.Small Cap	IJT	14.00%	0.00%	5%	$ 50,000	0.70%	0.00%
Rydex S&P 500 Pure Growth	US Stocks	RPG	12.00%	0.00%	10%	$ 100,000	1.20%	0.00%
					60%	$ 600,000	4.25%	0.00%

EXPLORE - Segment Allocation	$ 400,000	40.00%

Security	Sector	Symbol	Expected Return	Dividend Yield	% of Portfolio	Amount Invested	Return Contribution	Yield Contribution
iShares S&P Global Energy	Energy	IXC	8.00%	0.00%	10%	$ 100,000	0.80%	0.00%
Powershare Agriculture ETF	Agriculture	DBA	10.00%	0.00%	5%	$ 50,000	0.50%	0.00%
Market Vector Agri Business	Agriculture	MOO	10.00%	0.00%	5%	$ 50,000	0.50%	0.00%
iShares MSCI BRIC	BRIC	BKF	15.00%	0.00%	5%	$ 50,000	0.75%	0.00%
Wisdom Tree Emerging Mkts ETF	Emerging Mkts	DEM	15.00%	0.00%	5%	$ 50,000	0.75%	0.00%
Powershares Nasdaq	Technology	PNQI	15.00%	0.00%	10%	$ 100,000	1.50%	0.00%
TOTALS					40%	$ 400,000	4.80%	0.00%
PORTFOLIO TOTAL					100%	$ 1,000,000		
Dividend Yield								0.00%
Total Return							9.05%	

The weighting of the portfolio in each asset class is based on the fund managers' target rate of return that he wants to achieve for the portfolio and the historical long term average return for that class. The weighting is calculated as shown below.

One might also choose to simply the process even further by just equally weighting each sector.

6. Use Value Averaging to Implement the Trading Plan

Once the portfolio is created the VA Methodology is used to implement this simple but powerful automated trading system. Each month the VA system will calculate the amount of shares to either buy or sell based on the current market value of the security and a calculated predetermined target value for the security.

This system makes implementing the VA method easy and with excellent results. This automated system means that we don't need to spend a lot of time monitoring the portfolio to limit risk and achieve returns that a buy and hold strategy cannot match!

SUMMARY

Using the Value Averaging methodology is a new and easy way of designing an optimal portfolio and enhancing the returns. It gives you an incredibly diverse yet manageable set of investment candidates - you can have as little as five or a maximum of sixteen investments in your portfolio. You have the investing vehicles to make significant returns in all market conditions whether they are moving up or down. And your portfolio risk/return profile is completely controlled by the parameters of your automated trading plans and your allocations to each asset that you include.

For more information on Value Averaging and the method outlined here visit: www.vainvestmentsoftware.com or contact Bruce Ramsey at 905-901-3063