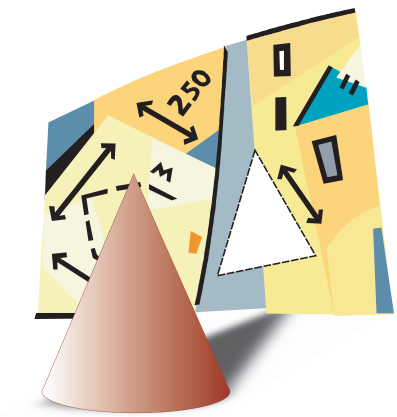
The Model Shadow Stock Portfolio's Long-Term Performance

By James B. Cloonan



The Model Shadow Stock Portfolio is down 9.3% year-to-date as compared to –3.0% for the S&P 500 index, as represented by the Vanguard 500 Index fund (VFINX).

The retreat by the model portfolio reflects not only the weakness in the overall market, but also the current weakness in value and small stocks. Longer-term results can be seen in Figure 1 and Table 3.

While this year is not yet over and a rebound is very possible, the Model Shadow Stock Portfolio could trail the overall market for the second year in a row. This happened twice before—in 1998–1999 and 2007–2008, as you can see in Table 3. So far, the portfolio has never underperformed three years in a row, although it has been down or even for three consecutive years (1998–2000).

Adjusting the Cumulative Return Chart

I am frequently asked, in reference to the cumulative return chart in Figure 1, why the Model Shadow Stock Portfolio seems to have outperformed its benchmarks by such a wide margin in recent years. The explanation is that any series of returns over the long term will result in an upward curve due to the compounding of the returns; it's the so-called magic of compounding. Some of you have suggested we should go to a logarithmic representation, where equal percentage moves appear equal, since the model portfolio return line is getting rather extreme on the chart.

We show both forms in Figure 1 here so you can see the difference, but we will only show the log chart in the future for cumulative return.

Portfolio Changes

There are no portfolio changes this quarter because we did not have a sell required for reasons either good (surpassing the value limit or size limit) or bad (violating earnings probation). The current portfolio can be seen in Table 1.

However, we had more stocks qualifying for purchase than we have seen in a long time. Even with my liquidity requirement added to the usual rules, there were 23 qualifying stocks. Five of these were either Chinese or already in the portfolio, but that still left 18 companies that met the initial purchase criteria. (At this point, we do not add any new stocks to the portfolio unless a stock is removed, freeing up funds.)

In the past, the expansion of qualifying stocks has gone hand in hand with a weaker market, and the eventual reduction in qualifying stocks after a maximum indicates an up market. However, our evaluation of this behavior as a possible early indicator of a market change proved that it was a lagging indicator and not a useful predictor.

Looking Ahead

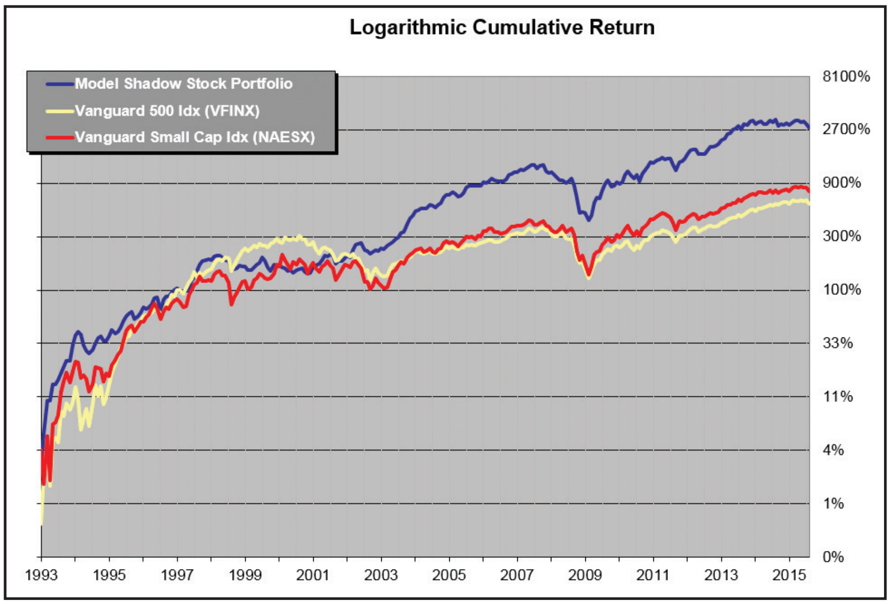
The market keeps reacting to possible dates when the Federal Reserve may initiate a gradual raising of interest rates. In a sense, the reaction seems foolish. When we have good news about the economy, the stock market goes down because that means the Fed will stop supporting the market with low rates. It's kind of like wanting to stay sick so the doctor won't take away your medicine.

Eventually the market will forget the Fed and concentrate on the economy and particularly company earnings. I remember when the important thing to watch was the various measures of money supply, and the market would dance to that music. In any event, how much impact on rates can the Fed have if everyone in the world wants their money in U.S. Treasuries?

While I have given up on 2015 being super bullish because of the pre-election year boost and the year ending in "5" phenomenon, I still have a bullish bias.

We will discuss the Model Shadow Stock Portfolio again in the January 2016 *AAII Journal*. In the meantime, you can follow it in the Model Portfolios area at AAII.com.

Figure 1. Model Shadow Stock Portfolio vs. Benchmarks (Through 8/31/2015)



Portfolio	Year-to-Date Return (%)	Annual Return (%) 1-Year	3-Year	10-Year	Ann'l Std Dev (%)	3-Year Risk-Adjusted Return (%)*
Model Shadow Stock Portfolio	(9.3)	(15.7)	15.5	11.8	17.9	9.4
Vanguard 500 Index (VFINX)	(3.0)	0.3	14.1	7.0	8.3	14.1
Vanguard Small Cap Index (NAESX)	(2.3)	(1.1)	15.1	8.2	10.9	12.5

**Relative to Vanguard Total Stock Market Index fund (VTSMX). Data as of 8/31/2015.*

Model Shadow Stock Portfolio Rules

Purchase and Sales Rules

Stock purchases must meet these criteria:

- No bulletin board or pink sheet stocks will be purchased.
- Price-to-book-value ratio must be less than or equal to 1.00. (Figure will change gradually with changes in overall market values.)
- Market capitalization must be between $30 million and $300 million. (Figure will change gradually with changes in overall market values.)
- The firm's last quarter and last 12 months' earnings from continuing operations must be positive and, if there are earnings estimates, the estimates must be positive for the current quarter and year.
- No financial stocks or limited partnerships will be purchased.
- No stocks on foreign exchanges or ADRs will be purchased because of different accounting and/or withholding tax on dividends. Foreign stocks traded primarily on U.S. exchanges are OK with one exception: The stock of any company whose primary business is in China will not be purchased.
- The share price must be greater than $4.
- In order to reduce trading by avoiding stocks that are forever marginal, any stock that was sold within two years will not be rebought.
- Note second item under Stock Order Guidance concerning spreads when buying shares.
- Price-to-sales ratio must be less than 1.2. (Figure may change

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Table 1. The Model Shadow Stock Portfolio

Company (Ticker)	Current Price ($)	52-Week High ($)	52-Week Low ($)	Market Cap ($ Mil)	P/E Ratio (X)	P/B Ratio (X)	Div Yield (%)	Notes
Alamo Group, Inc. (ALG)	51.49	64.45	37.93	588.1	14.4	1.68	0.6	
CDI Corp. (CDI)	10.23	19.24	9.44	201.5	nmf	0.75	5.1	
CSS Industries Inc. (CSS)	26.48	33.00	23.40	244.8	16.4	0.94	2.7	
Ducommun Incorporated (DCO)	23.62	33.45	22.39	261.8	34.2	1.01	0.0	
Ennis, Inc. (EBF)	16.33	19.17	12.51	421.5	nmf	1.45	4.3	
Flexsteel Industries (FLXS)	30.80	46.11	27.25	230.7	10.7	1.23	2.3	
Global Power Equip (GLPW)	4.60	17.68	3.65	79.0	7.1	0.28	7.8	
Hardinge Inc. (HDNG)	10.27	13.09	8.13	131.8	nmf	0.75	0.8	
Hooker Furniture Corp. (HOFT)	23.86	27.30	14.25	258.0	19.6	1.76	1.7	
Key Tronic Corp. (KTCC)	10.40	12.49	7.50	109.7	38.5	1.10	0.0	
Kimball Electronics (KE)	11.75	17.01	5.19	342.8	13.2	1.10	0.0	
L S Starrett Co. (SCX)	15.79	21.95	12.62	110.5	12.5	0.92	2.5	qualified as of 8/31/2015
LMI Aerospace, Inc. (LMIA)	12.00	15.39	9.20	158.8	nmf	1.30	0.0	
Marlin Business Services (MRLN)	13.72	21.75	12.62	175.2	9.8	0.97	4.1	
Olympic Steel, Inc. (ZEUS)	12.95	24.35	6.40	142.5	nmf	0.56	0.6	earnings probation (2015q2)
PC Connection, Inc. (PCCC)	21.07	29.50	19.20	556.5	12.6	1.48	0.0	
PCM Inc (PCMI)	9.78	11.20	7.43	117.1	nmf	0.93	0.0	
RCM Technologies, Inc. (RCMT)	4.98	7.33	4.16	63.5	11.3	1.43	0.0	
Renewable Energy Group (REGI)	8.42	12.80	7.25	365.8	10.4	0.51	0.0	
REX American Resources (REX)	53.62	109.88	43.50	370.3	6.6	1.25	0.0	
Rocky Brands Inc. (RCKY)	18.25	23.11	12.61	138.0	12.5	0.98	2.4	qualified as of 8/31/2015
Salem Media Group (SALM)	6.40	11.00	4.38	162.9	22.1	0.79	4.1	qualified as of 8/31/2015
Shoe Carnival, Inc. (SCVL)	25.90	30.00	16.68	530.6	19.3	1.49	1.0	
SigmaTron International (SGMA)	6.00	11.12	5.02	25.0	27.3	0.43	0.0	
TravelCenters of America (TA)	11.79	18.10	8.37	452.7	6.8	0.79	0.0	
Ultra Clean Holdings (UCTT)	6.79	10.29	5.26	215.4	135.8	1.03	0.0	
Universal Stainless & Alloy (USAP)	12.99	32.45	10.90	92.3	33.3	0.45	0.0	
Vishay Precision Group (VPG)	11.19	17.95	10.25	139.9	56.0	0.78	0.0	qualified as of 8/31/2015
VOXX International (VOXX)	7.75	11.55	6.56	187.5	nmf	0.48	0.0	
Willis Lease Finance (WLFC)	16.75	22.91	15.11	139.8	54.0	0.60	0.0	

nmf = no meaningful figure
Source: AAII's Stock Investor Pro*/Thomson Reuters. Data as of 8/31/2015.*

Explanation of Notes

Approaching Size Limit: Stocks are sold if their market capitalization goes above three times the initial maximum criterion and there is a stock to replace it. The current market capitalization maximum for initial screening is $300 million. Stocks are marked "approaching size limit" if their current market cap exceeds 2½ times the initial criterion, or $750 million.

Approaching Value Limit: Stocks are sold once their price-to-book-value ratio goes above three times the initial criterion and there is a stock to replace it. The current initial price-to-book ceiling is 1.00. Stocks are marked "approaching value limit" if their current price-to-book-value ratio exceeds 2½ times the initial criterion, or 2.50.

Earnings Probation: If the last 12 months' earnings from continuing operations are negative, the stock is put on probation; if a subsequent quarter has negative earnings prior to 12-month earnings becoming positive, the stock is sold. The date in parentheses is the fiscal quarter during which the company first reported negative trailing 12-month earnings.

Qualified as of: Stock still qualified as a buy when the screen was run with current data. Stocks that don't currently qualify as a buy are held until they meet one of the sell rules.

See the Model Shadow Stock Portfolio area of AAII.com for more information.

Table 2. Third-Quarter 2015 Transactions

Company (Ticker)	Reason
Buy	
No buys for third quarter.	
Sell	
No sells for third quarter.	

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gradually with changes in overall market values.)

- Eliminate any company that failed to file a 10-Q (quarterly) report in the last six months.

Stocks are sold if any of the following occur:

- If last 12 months' earnings from continuing operations are negative, the stock is put on probation; if a subsequent quarter has negative earnings prior to 12-month earnings from continuing operations becoming positive, the stock is sold.
- The stock's price-to-book-value ratio goes above three times the initial criterion and there is a stock to replace it.
- Market capitalization goes above three times the initial maximum criterion and there is a stock to replace it.

Stock Order Guidance

- These rules are for general guidance. Your own experience, market conditions and the size of the position will impact your own decisions. The results in the model portfolio were obtained while sometimes paying more.
- Market orders are not used. Instead, if the quoted bid-ask spread is less than 2% (ask price minus bid price, divided by ask price), place a limit order at the ask price for a buy and at the bid price for a sell. If the bid-ask spread is more than 2%, try to place a limit order between the bid and ask prices to keep transaction costs low. If necessary, build a position gradually. With low commissions, it is often better to place partial orders than to try to establish a large position all at once. Be patient.
- The average daily dollar volume should be at least four times the amount needed for your position. This will ensure liquidity to get in and out of the position, even if you need to grow the position gradually and sell gradually. This will result in a varying number of qualifying stocks for each investor.
- If price changes cause a stock to become ineligible (due to changes in price-to-book-value ratio or market capitalization) when only part of the order has been filled, stocks already purchased are kept but the balance of the order is canceled.

Table 3. Model Shadow Stock Portfolio: Annual Performance

	Average Annual Return (%)			Cumulative Value of $10,000 ($)		
Year	Model Shadow Stock Portfolio	Vanguard 500 Index (VFINX)	Vanguard Small Cap Index (NAESX)	Model Shadow Stock Portfolio	Vanguard 500 Index (VFINX)	Vanguard Small Cap Index (NAESX)
1993	32.3	9.9	18.7	13,230	10,989	11,870
1994	2.0	1.2	(0.5)	13,492	11,118	11,810
1995	20.7	37.4	28.7	16,291	15,282	15,204
1996	22.3	22.9	18.1	19,927	18,775	17,959
1997	44.3	33.2	24.6	28,756	25,010	22,375
1998	(8.9)	28.6	(2.6)	26,188	32,168	21,790
1999	(0.0)	21.1	23.1	26,187	38,945	26,831
2000	(7.7)	(9.1)	(2.7)	24,163	35,418	26,116
2001	21.4	(12.0)	3.1	29,325	31,160	26,926
2002	10.8	(22.1)	(20.0)	32,506	24,259	21,535
2003	73.1	28.5	45.6	56,268	31,174	31,360
2004	43.7	10.8	19.9	80,843	34,530	37,587
2005	17.9	4.8	7.4	95,353	36,180	40,376
2006	29.4	15.6	15.6	123,363	41,832	46,687
2007	(1.8)	5.4	1.2	121,166	44,083	47,227
2008	(50.8)	(37.0)	(36.0)	59,582	27,764	30,217
2009	72.3	26.5	36.1	102,665	35,120	41,130
2010	45.4	14.9	27.7	149,238	40,358	52,529
2011	6.3	2.0	(2.8)	158,701	41,155	51,067
2012	33.3	15.8	18.0	211,588	47,666	60,274
2013	61.0	32.2	37.6	340,599	63,009	82,966
2014	(5.8)	13.5	7.4	320,844	71,516	89,105
YTD	(9.3)	(3.0)	(2.3)	308,889	61,138	81,099
Since Incep	**15.8**	**8.9**	**11.6**	**308,889**	**61,138**	**81,099**

Data as of 8/31/2015.

Management Rules

- Equal dollar amounts are invested in each stock initially.
- Decisions are made only at the end of each quarter. In order to react to the majority of earnings reports as soon as possible, quarterly reviews are made in February, May, August, and November.
- Best judgment is used for tenders or mergers, but all criteria must be obeyed.
- At the end of a quarter, if receipts from stocks sold exceed requirements for new purchases, the excess receipts—up to 5% of the portfolio's value—are kept in cash until the next quarter. If the excess receipts are greater than 5% of the total portfolio value, the amount above 5% is distributed to smaller holdings that still qualify

as buys. Efficient quantities are purchased: If over 10% of the portfolio is in cash, the price-to-book-value ratio can be moved up, but never over 1.00.
- At the end of a quarter, if receipts from stock sales are insufficient to buy all newly qualifying stocks, purchases are made based on the width of the bid-ask spread and the number of shares at bid or ask price.
- Note that if you are managing your own portfolio, it should consist of at least 10 stocks. If you are developing the portfolio gradually, you can do it stock by stock, but don't put more than 10% of your funds in each additional stock. More than 20 stocks is not needed until the portfolio exceeds $1 million.

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is repeated on the breaths of hopeful fans everywhere. The implication is that this hitter has a proven track record of performance that, although he is in a dry spell, is reason enough to believe that on any given pitch, he'll send one over the outfield wall and win the game.

It's easy to mistake my theory with that sort of blind hope. It is not the same thing at all. The 52-Week Low strategy hits its fair share of home runs, but we believe it is more appropriate to try for singles, walks and balks. [Editor's note: A balk occurs when a pitcher interrupts his delivery of a forward pitch. It results in the batter advancing to first base.] We are managing consistency in the often unpredictable construct of the market. We are using a strategy akin to Sabermetrics (the application of statistical analysis to baseball) in the age of the home-run hitter. We don't look at a stock that's in a dry spell and hope that it will return to its former glory. Instead, we look at an overlooked, undervalued stock with a track record of consistent performance and a clean bill of health. If such stocks are in a slump, the opportunity is even better. And we don't send them out there to hit a game-winning home run. We send them out there to bunt in the top of the second.

Baseball analogies aside, the point is to identify good companies first and then look for good companies whose stocks have underperformed and are now undervalued.

The underlying concept of the 52-Week Low formula is to find winners in stocks that have underperformed and underwhelmed in the year leading up to their addition to the strategy. Why is this important? Because you need to distinguish between companies that have underperformed and those that are undervalued. Undervalued stocks have usually underperformed. It's one of the reasons they are undervalued. But not all underperforming stocks are undervalued. Some companies haven't performed well because they are unstable or unsound.

The strategy filters attempt to weed out those companies that are bound to continue losing value from those that have lost value and are primed for recovery. The key is to maintain the discipline of distinction. It's easy to rationalize that a company that has passed four of the five filters—or three of the five—is bound for a recovery. This is hope in the face of fear. Investors have to manage that rationalization, recognize it for what it is and walk away. If a company fails even one of the filters and is trading at historic lows, there is probably a good reason and one that goes beyond loss of popular sentiment.

Discipline Is Key

The 52-Week Low strategy only works if an investor adheres to it. This means rigidly demanding that all the companies pass all five of the filters, and trusting the five filters to turn fear of negative trailing returns into realized opportunity. It also means conducting due diligence to ensure there isn't a significant problem with a passing company not caught by the strategy's filters. It's hard, particularly at first, to look at the numbers in red and see anything but loss. But those using the strategy will learn, as I have, to embrace the trailing losses and even get excited by them.

As mentioned before, going against the grain and seeking opportunity in places that others have abandoned is not without pain and discomfort. These pangs of discomfort are false. They are emotions disguising themselves as rationale. Maintain the process and stick to the strategy. Data, time and results should prove the diligence worthwhile.

Luke L. Wiley, CFP, CRPC, is a senior vice president of wealth management at UBS Financial Services. He is author of "The 52-Week Low Formula" (John Wiley & Sons, 2014). Find out more at www.aaii.com/authors/luke-wiley.