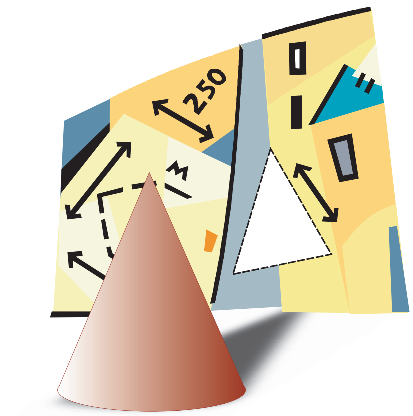
Model Shadow Stock Portfolio: Sell Rules Dictate a Change

By James B. Cloonan



The Model Shadow Stock Portfolio has started to break out of its fourth-quarter 2014 pullback but hasn't gotten back to its old high yet.

Year to date, it is underperforming the S&P 500 index as measured by Vanguard 500 Index fund (VFINX)—1.0% to 2.6%, respectively. This and longer-term results can be seen in Figure 1 and Table 3.

I was looking at the history of the Model Shadow Stock Portfolio and noticed that since 1993, there were three times when the Vanguard 500 Index fund outperformed the model portfolio, and each time it did so for two years: 1995–6, 1988–9, and 2007–8. So our portfolio may not catch back up this year. Of course past results are no guarantee of the future.

Portfolio Changes

Table 1 lists the current holdings in the Model Shadow Stock Portfolio. We made two changes to the portfolio during this quarter's review, which are shown in Table 2.

Standard Motor Products (SMP) has been flirting with our sell criteria for quite some time. At this quarterly review, the stock blew through both the value (price-to-book) and capitalization-size limits, so it was sold. As always, we

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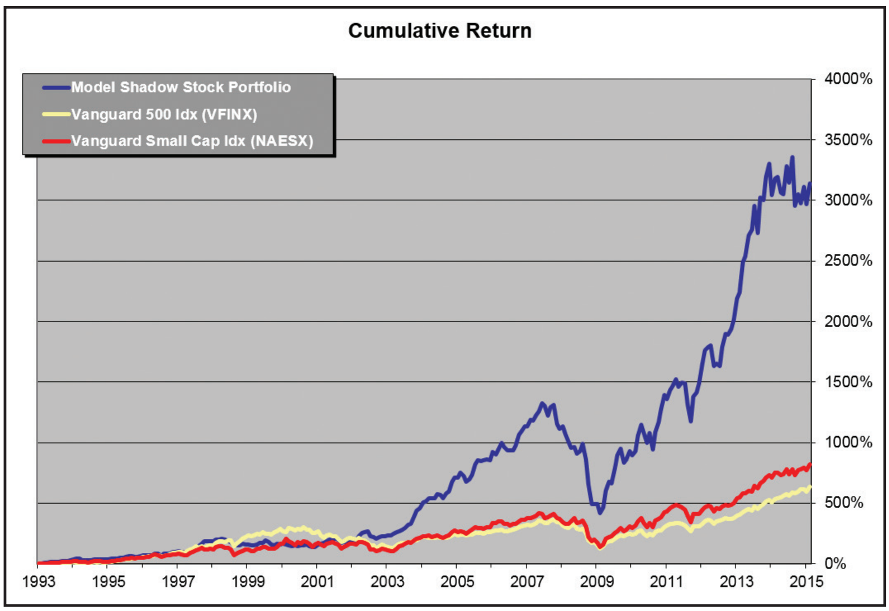
Figure 1. Model Shadow Stock Portfolio vs. Benchmarks (Through 2/28/2015)



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	1.0	(1.3)	20.3	14.2	18.6	12.2
Vanguard 500 Index (VFINX)	2.6	15.3	17.8	7.9	9.4	17.8
Vanguard Small Cap Index (NAESX)	3.5	8.0	17.8	9.6	11.8	14.9

**Relative to Vanguard Total Stock Market Index fund (VTSMX).*
Data as of 2/28/2015.

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)	50.15	60.65	37.93	580.2	17.1	1.79	0.6	
CSS Industries Inc. (CSS)	28.90	33.00	22.75	270.0	16.3	0.99	2.5	
Ducommun Incorporated (DCO)	24.88	32.00	22.45	272.3	30.3	1.05	0.0	
Ennis, Inc. (EBF)	13.95	17.06	12.51	359.2	nmf	1.24	5.0	
Five Star Quality Care (FVE)	3.64	6.09	3.23	178.4	nmf	0.58	0.0	
Flexsteel Industries (FLXS)	29.85	40.44	28.56	222.0	11.6	1.26	2.4	
Global Power Equip (GLPW)	13.30	20.04	10.96	227.7	14.1	0.81	2.7	
Hardinge Inc. (HDNG)	11.42	15.02	9.70	146.4	nmf	0.86	0.7	
Hooker Furniture Corp. (HOFT)	18.45	19.51	13.60	198.8	19.4	1.42	2.2	
International Shipholding (ISH)	14.00	32.91	14.00	102.2	nmf	0.38	7.1	
Key Tronic Corp. (KTCC)	10.29	11.50	7.50	108.6	42.9	1.10	0.0	
Kimball Electronics (KE)	12.52	13.77	5.19	365.2	15.7	1.21	0.0	
Kimball International (KBAL)	9.55	15.68	8.38	371.2	22.7	2.55	2.1	approaching value limit
L.S. Starrett Co. (SCX)	21.65	21.95	12.62	146.6	18.7	1.19	1.8	
LMI Aerospace, Inc. (LMIA)	14.24	15.75	12.05	180.8	nmf	1.29	0.0	
Marlin Business Services (MRLN)	18.71	23.49	15.97	240.2	12.5	1.38	2.7	
Mitcham Industries (MIND)	6.31	15.80	5.14	76.3	52.6	0.49	0.0	
Olympic Steel, Inc. (ZEUS)	15.09	29.58	13.28	165.9	26.0	0.55	0.5	qualified as of 2/27/2015
PC Connection, Inc. (PCCC)	25.62	29.50	19.11	673.9	15.9	1.90	0.0	
PCM Inc. (PCMI)	9.61	11.82	7.43	117.9	17.5	0.89	0.0	
RCM Technologies, Inc. (RCMT)	6.02	7.33	4.61	75.6	22.3	1.12	0.0	
Renewable Energy Group(REGI)	8.92	12.89	8.30	377.4	7.6	0.56	0.0	
REX American Resources (REX)	54.36	110.65	46.77	435.1	5.4	1.31	0.0	
Rocky Brands Inc. (RCKY)	19.88	21.00	12.61	150.1	15.3	1.09	2.0	
Salem Communications Corp (SALM)	7.41	11.00	5.04	187.3	17.6	0.92	3.5	
Shoe Carnival, Inc. (SCVL)	24.54	27.44	16.68	497.8	21.3	1.47	1.0	
SigmaTron International (SGMA)	6.56	12.92	5.55	26.6	19.9	0.48	0.0	
TravelCenters of America (TA)	13.65	14.21	7.18	523.3	12.1	1.01	0.0	
Universal Stainless & Alloy (USAP)*	22.62	38.88	19.03	160.4	40.4	0.78	0.0	qualified as of 2/27/2015
VOXX International (VOXX)	8.60	14.40	6.56	207.5	nmf	0.49	0.0	
Willis Lease Finance (WLFC)	21.34	26.19	17.76	179.6	12.3	0.78	0.0	qualified as of 2/27/2015

** Added to portfolio 3/2/2015.*
nmf = no meaningful figure
Source: AAII's Stock Investor Pro/Thomson Reuters. Data as of 2/28/2015.

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 0.80. Stocks are marked "approaching value limit" if their current price-to-book-value ratio exceeds 2½ times the initial criterion, or 2.00.

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.

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 0.80. If the price-to-book-value ratio moved up a bit since the stock was included in the portfolio, it is still OK to purchase the stock unless this ratio goes above 0.90. (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 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.

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 0.90.
- At the end of a quarter, if receipts from stock sales are insufficient to buy all newly qualifying stocks, purchases are made based on lowest price-to-book-value ratio. However, if this difference is not greater than 0.10 (i.e., 0.65 vs. 0.50), use lowest bid-ask spread.
- 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.

Table 2. First-Quarter 2015 Transactions

Buy

Company (Ticker)	Maximum Price to Pay
Universal Stainless & Alloy Prods (USAP)	$25.90

Sell

Company (Ticker)	Reason
Standard Motor Products (SMP)	exceeds value & size limits

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wish the stocks that have done well for us good luck in someone else's mid-cap portfolio.

With the proceeds from the sale of Standard Motor, Universal Stainless & Alloy Products (USAP) was added to the portfolio. Based on the rule to purchase the stock unless the price-to-book ratio goes over 0.90, the maximum price to pay for the Universal Stainless & Alloy would be $25.90.

Portfolio Review Errors

Over 20 years of maintaining this portfolio, we have made some errors, which I imagine is pretty typical of any investor. Errors have ranged from buying the wrong number of shares to having the stock show a loss in the period between our data source cut-off and the time of purchase. We scan for late developments, but we have missed the news a few times. Most times we reverse the mistake as soon as possible and take our loss if there is one.

This time, I inadvertently loaded an older data set into my software program, which resulted in a couple of errors. First, in my quarterly review of current holdings, Kimball International, Inc. (KBAL) was under price-to-book limit of 2.40, so it was not sold. In reality, the stock ended February with a price-to-book ratio of 2.55 and should have been sold. I will continue to hold Kimball International until the next quarterly review.

Second, after selling Standard Motor Products on February 27, I screened for new stocks to buy using the older data and Omega Protein Corp. (OME) came up in the results. I checked its current price-to-book ratio and saw that it had gone too high, but while I was looking the price made a sudden large move down that made it qualify and I placed a buy order. I got a partial fill, and then the stock went back to where it had been and soon began to move up from there. It continued stronger and just had earnings above expectations; it continues to move up as of this writing.

There was no closing price for Omega Protein that would have had a price-to-book ratio at the purchase criterion of below 0.80 since it last qualified earlier in February. Therefore, I quickly sold it. Though the buy was a mistake, it turned out to be one of the rare times that a mistake led to a small profit.

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	1.0	2.6	3.5	343,835	64,616	85,886
Since Incep	**16.8**	**9.4**	**10.4**	**343,835**	**64,616**	**85,886**

Data as of 2/28/2015.

Looking Ahead

By most measures, the market is just above even for the year to date. We are a long way from the Mystery Cycle (a year ending in 5 and this being the year before a presidential election) average of up 42% or even its worst case of up 32%. Maybe the mystery will be resolved and the cycle will turn out to be just another case of coincidence. I would like to think there is still time, and the economy looks pretty good.

The thing that amazes me is that whenever there is good economic news the market goes down. According to the commentators, this is because if the economy is strong, the Federal Reserve will let interest rates rise and investors want the Fed to be supportive. I don't understand it. It's like wanting to stay sick so the doctor won't stop the medication. Sure, bonds will be more competitive if interest rates are higher, but a better economy means higher earnings and ultimately that's what drives stock prices.

I know that the rising dollar will hurt some companies—foreign and international the most. I know lower oil hurts the oil-related companies. But both of these, I believe, have more positive than negative impact. Why don't we all take a driving trip through Europe this summer?

Fed action on interest rates still seems aimed at year-end, but the strengthening labor market could move that up. We will have to wait and see.

Our next discussion of the Model Shadow Stock Portfolio will be in the July *AAII Journal*. In the meantime you can follow the portfolio at AAII.com. ➤

James B. Cloonan is founder and chairman of AAII.

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rebalanced. For both portfolios, the investor would have ended 2014 with 33% less wealth than he or she would have had if rebalancing was utilized. This behavior gap is even larger when the panic scenario is compared against the no-rebalancing scenario.

The main point is that selling out of fear is extremely costly. Any step that can be taken to prevent panic-selling during a bear market, whether it is rebalancing or another strategy, can be beneficial.

A Change in the Data Used

A new source for inflation data was used as a part of this year's analysis. The inflation data for adjusting the withdrawal rate was pulled from the St. Louis Federal Reserve's FRED (Federal Reserve Economic Data) database (http://research.stlouisfed.org/fred2/). Specifically, the Consumer Price Index (CPI) for All Urban Consumers: All Items (CPIAUCSL). An average of the data from the first three quarters of 2014 was calculated to determine how much the end-of-year withdrawal rate for 2014 should be increased by relative to the 2013 withdrawal rate.

Previously, the inflation data was pulled from the Econstats website (www.econstats.com). This website no longer appears to be updated, though it is still contains considerable historical data. The inflation data used for adjusting the withdrawal rates for 1988 through 2013 is unchanged.

Retirees seeking data to determine how to adjust their withdrawal rates may want to consider using the FRED database. Though a lengthy discussion could be had on which statistic best measures inflation, it is more important to simply use data that gives a good approximation and is widely followed. The CPI provides a good estimation, despite its critics, of the rate of inflation and can be easily accessed via a variety of economic websites. ➤

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