OPBM II: An Interpretation of the CAN SLIM Investment Strategy

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The CAN SLIM investment strategy was developed by William J. O'Neil and has been popularized by Investor's Business Daily. This trading strategy involves selecting stocks based upon seven criteria, and requires active portfolio management. This paper presents and tests a simplified version of the CAN SLIM strategy, which could relatively easily be used by individual investors using stock screeners. The simplified trading strategy outperformed the NASDAQ 100 Index by .94% per month for the period 2010 through 2013 and achieved a greater reward per unit of risk when compared to the NASDAQ 100.

INTRODUCTION

The CAN SLIM trading strategy, created by William J. O'Neil, involves selecting stocks based upon seven criteria (2009). Despite the fact that the seven selection criteria are relatively simple to understand conceptually, they can be extremely difficult to actually use to select stocks in practice. This is particularly problematic as the CAN SLIM strategy is viewed as a tool for the individual investor, who may not have the knowledge and/or ability to use the strategy correctly.

This paper develops and tests a simplified version of the CAN SLIM strategy- outperform the broad market (OPBM) II, which reduces the seven selection criteria to four criteria. This simplified CAN SLIM trading strategy is designed so that the average individual investor (with little to no analytic capability) could easily select stocks using widely available stock screeners. Thus, individual investors could make use of this strategy without having to spend a substantial amount of time developing the market expertise required to successfully implement the traditional CAN SLIM investing strategy.

Most preliminary research regarding the effectiveness of the CAN SLIM strategy involve using the CAN SLIM criteria to select stocks from the S&P 500 and using back-testing to compare the returns of this "CAN SLIM portfolio" to the performance of the S&P 500 index (Lutey, Crum, & Rayome, 2013). This paper makes use a similar methodology, but the NASDAQ 100 is used instead of the S&P 500. Back-testing is used to compare the performance of the portfolio of stocks selected from the NASDAQ 100 using the simplified CAN SLIM strategy (OPBM II) to the performance of the NASDAQ 100 index. The CAN SLIM approach is often viewed as a strategy for selecting stocks in the S&P 500 index, and this paper attempts to examine if this strategy is effective for the NASDAQ 100 as well.

LITERATURE REVIEW

Outperforming the Broad Market and CAN SLIM

Financial markets are commonly viewed as being weak-form, semi-strong-form or strong-form efficient (Fama, 1970). The more efficient a market is, the more difficult it is to use active trading to consistently outperform the market on a risk-adjusted basis. Much research has shown that the stock markets in developed countries, such as the United States, appear to be highly efficient (Horowitz, Loughran, & Savin, 2000, Fama, 1998). Nevertheless, there is still debate to the extent to which financial markets are efficient. The fields of cognitive psychology and behavioral finance argue that human beings are subject to bounded rationality (Simon, 1955), meaning their decision making capabilities are limited by factors such as lack of information, a lack of time, and cognitive limitations. This bounded rationality likely limits the rationality of their investment decisions as well (Dietrich et al., 2001). Since the efficient market hypothesis tends to rely on the idea that investors are rational decision makers able to obtain and process large amounts of data before making decisions, any deviance from this assumption with real world investors would likely lead to stock markets displaying some degree of inefficiency. Empirical researchers have documented some anomalies in financial markets which indicate that markets may not be perfectly efficient, such as the January effect (Haug & Hirschey, 2006) and the firm size effect (van Dijk, 2011). Also, some trading strategies, relying on either technical analysis, fundamental analysis, or a combination of both, have been shown to be effective in outperforming market benchmarks. Specifically, some research suggests that the Bollinger Bands (Balsara, Chen, & Zheng, 2007), trading range breakout (Raj & Thurston, 1995) and CAN SLIM (Lutey et al., 2013; Schadler & Cotton, 2008) trading strategies may outperform relevant market benchmarks.

This paper focuses specifically on the CAN SLIM trading strategy, which was created by William J. O'Neil (2009). The CAN SLIM strategy is based on his analysis of 500 of the biggest stock market winners from 1953 to 1993. The book *How to Make Money in Stocks* (2009) explains the CAN SLIM strategy in substantial detail. The seven parts of the mnemonic from this book are summarized below:

C - Current earnings. O'Neil advises against buying stocks that do not show earnings per share that are up at least 18-20% compared to the same quarter of the previous year. An increase of 25% in earnings per share (EPS) is often used as a minimum increase in EPS that a stock should have in order to consider purchasing it.

A - Annual earnings. Investors should look for stocks that have experienced increases in annual earnings in the past three years. Although different thresholds can be used, an earnings growth of at least 25% is viewed as a minimum growth rate in annual earnings. Firms should also have a return on equity (ROE) of 17% or more, as this indicates that the firm is using its money effectively.

N – New. O'Neil states that it takes something new to cause a substantial increase in the price of a stock. While new products are perhaps the obvious example of something new in a firm, new management or simply the firm being newer may indicate the possibility for a rapid increase in stock price.

S - Supply and demand. Stocks with fewer shares outstanding often have the possibility to perform well, since supply is restricted. O'Neil recommends using both the daily trading volume and the percentage volume that is above or below the stock's average daily volume in the last three months as metrics of demand.

L - Leader or laggard? Investors want to find this industry leaders, and conversely avoid buying stocks in companies that they are comfortable with. The proprietary Relative Price Strength Rating published by *Investor's Business Daily* attempts to measure this concept. The scores ranges from 1 to 99, with the score representing the percentage of stocks in the market the stock has outperformed over the past 52 weeks. O'Neil recommends only considering purchasing stocks with scores in the 80s and 90s,

I - Institutional sponsorship. This refers to the extent to which the stock is owned by mutual funds, pension funds, insurance companies, and other institutional investors. Although a high performing stock doesn't need a large number of institutional owners (in fact, too much institutional ownership can be viewed negatively), it does need to have some. Both the quality and the change in the number of

institutional sponsors should be observed. *Investor's Business Daily* publishes a metric called the Month Performance Rating, which provides a letter grade of the performance of mutual funds over the past 36 months. Funds with ratings of B+ or higher indicate a good performing mutual fund, and thus such a fund would be considered a quality institutional sponsor. An increase in the number of institutional investors purchasing the stock is also considered a positive sign.

M - Market Direction. O'Neil argues that even if an investor is correct on the other six rules of the CAN SLIM strategy, they will most often lose money if they are wrong about the general direction of the market. Thus, investors should follow market indices such as the S&P 500 and the NASDAQ 100, and learn the historical patterns that they tend to follow. This can help an investor determine whether their money should be allocated to stocks or whether it should be sitting on the sidelines.

In addition, the CAN SLIM trading strategy incorporates an important 3:1 profit taking policy. No matter at what per share price a stock is purchased, if it ever falls 7-8% below that purchase price, an investor should immediately sell the stock in order to limit their loses. On the upside however, CAN SLIM suggests systematically taking profits after a 20%-25% increase in share price under the assumption that many stocks will retreat and build a new basis after reaching this level.

Based on the seven parts of the CAN SLIM mnemonic, it is clear that the CAN SLIM strategy involves the use of both technical and fundamental analysis. One of the major rules of the CAN SLIM strategy is purchasing stocks in firms with new products or services, new management or anything new and entrepreneurial that could spark growth (O'Neil, 2009). Thus, firms that are effective at corporate entrepreneurship and developing new products are preferred to those that are less innovative and that rely on selling older products or services. Also, the trading strategy indicates that only the top stocks who are leaders in their market sector should be purchased. The CAN SLIM trading strategy advises moving towards conserving capital during correction phases and bear markets and making buy decision only in confirmed bull markets. This part of the CAN SLIM criteria is particularly complex as recognizing chart patterns and understanding cyclical markets are required, and this sort of technical analysis may be exceeding difficult for the typical individual investor.

Empirical Research Examining the CAN SLIM Strategy

The CAN SLIM strategy has been examined empirically by a number of researchers. Deboeck (2000) explores the use of self-organizing maps to help determine differences between the holdings of "smart" investors and holdings of large institutions. Suh, Li and Gao (2004) make use of artificial intelligence to create a program that analyzes the cup and handle chart formation which is a trigger for a CAN SLIM purchase. However, portfolio construction and return analysis are not performed in these articles. Other researchers have performed more explicit examinations of the effectiveness of the CAN SLIM strategy. Olson, Nelson, Witt and Mossman (1998) examine the CAN SLIM strategy on S&P 500 stocks from 1984 to 1992. They found using this strategy provided a market adjusted abnormal monthly returns of 1.81% using S&P 500 stocks and a 3.18% return using an arbitrage portfolio. Gillette (2005) applies the CAN SLIM strategy to equities listed on the German stock market and determines that CAN SLIM strategy was not effective in outperforming the German stock market. However, the author did use a simplified CAN SLIM strategy by dropping the N (New), L (Leader), and I (Institutional Ownership) criteria. This may suggest that one or more of those criteria are critical to the success of the trading strategy.

Beyoglu and Ivanov (2008) examine the performance of combining a CAN SLIM selection strategy with various technical analysis signals. They found that the CAN SLIM strategy combined with a Moving Average Crossover System led to high expected profits per trade. Schadler and Cotton (2008) use data from the AAII (American Association of Individual Investors) CAN SLIM stock screener to test the effectiveness of the CAN SLIM strategy using data from 1998 through 2005. An annualized return of 30.86% was provide by the CAN SLIM screener portfolio. During the same time span, the associated best-fit index (S&P SmallCap 600) only realized an annualized return of 9.49%. This is similar to findings from the American Association of Individual Investors, which found that the CAN SLIM strategy returned a compound growth rate of 1521.7% versus the S&P 500's gain of 54.92% from 1998

through December 31, 2007 (O'Neil's CAN SLIM Screen). Cheh, Kim, and Lee (2011) test a simplified version of the CAN SLIM strategy, using only two selection criteria, both related to increasing earnings per share. They found that their strategy outperformed the Wilshire 5000 Index. Najafi and Asgari (2013) apply the CAN SLIM strategy to the Tehran Stock Exchange and find that stocks selected using the CAN SLIM criteria provided considerable future growth. Finally, Lutey et al. (2013) compare returns from the S&P 500 to those generated from a simplified CAN SLIM strategy. The simplified CAN SLIM strategy makes use of only three rules in selecting stocks: five year average of annual earnings growth must be greater than 20%, current quarterly earnings growth must be greater than 25% and the stock price must be greater than $10. This simplified CAN SLIM strategy outperformed the S&P 500 index for the years 2001-2012.

OPBM II STRATEGY

Selection Criteria

The purpose of this paper is to see if the average investor (with little or no analytic capability) can outperform the NASDAQ 100 using an automatized version of a predominant S&P 500 strategy. Most preliminary research and findings regarding the validity of the CAN SLIM method revolve around S&P 500 back-testing and research. This paper moves across new markets and multiple timeframes to further test the validity of the CAN SLIM method.

Due to the somewhat subjective and highly complex nature of the CAN SLIM system, the OPBM II system cuts down on the analytic requirements of investors, allowing them to achieve excess returns above the NASDAQ 100 without spending countless hours perfecting the traditional CAN SLIM system. OPBM II cuts down on the analytic requirements while staying true to the core CAN SLIM methodology through utilizing a custom CAN SLIM ranking system.

In a previous version of the OPBM strategy (Lutey, Crum & Rayome, 2013) a simplified version of the CAN SLIM method was used to outperform the S&P 500 index. This simplified version involved three simple rules for placing trades using EPS % growth quarterly, EPS % growth yearly, and price. These rules created a 0.84% excess return, per month over an 11-year period. The system did not account for CAN SLIM factors such as institutional sponsorship, or initial risk control metrics like the 7% stop rule. This paper builds on this modified version of CAN SLIM by keeping the same rules regarding desired EPS growth (both quarterly and yearly) while incorporating a new ranking system for institutional sponsorship.

The option to randomize holdings has been modified to reflect a more accurate representation of William O'Neil's CAN SLIM system. After filtering based on specific criteria (price and EPS) the system ranks holdings based on specific CAN SLIM criteria. Any company on the NASDAQ 100 exchange is considered, until it drops below a 30% (3 year average) growth rate. Next, from the pool of companies that pass this criterion, any company that does not have at least a 20% increase in EPS over the previous quarter is eliminated. The firms remaining after these screenings are then ranked. Firms with the highest earnings per share % change from the current quarter over the previous quarter are ranked highest. This is then followed by a secondary ranking for institutional sponsorship. Lastly, the three year average change in earnings per share is considered.

Rebalancing

It should be noted that the system rebalances (re-runs the screen and possibly select new holdings) every week. The price chosen for selected companies will be based off of the next trading days opening price. Slippage will be 0.5%. For commissions $10 per exit and entry are assumed.

Weighting

Ideally, the system will select 10% weighting to each position with a maximum of 10 positions. The system is however, allowed to deviate from the 10% weighting and allocate up to 50% of the weight to

any one position. This is done randomly and based off of the ranking system which is described previously.

Exits/Closing Positions

After positions are chosen the system will sell on either a rebalance or stop. If a stock drops 7% after purchase it will be removed but considered at the rebalance the next week (if it still passes criteria). This hard stop is to avoid large losses. The 7% rule is based purely on entry price. Profits are only taken if a stock does not pass the initial screening criteria. So, if EPS fall short in a given quarter after a stock has been held for 3 months, it will be removed and profits will be taken. This strategy ensures purely mechanical, non-emotional based trading that allows winning stocks to ride and losses to be minimized.

Back-Testing

Three time periods were used in back testing the OPBM II strategy. First, going back three years (2010) was analyzed for superior returns versus the benchmarked Nasdaq 100 index. The second inception date went back to the market crash (2008). The third and final inception is a fourteen year comprehensive time frame back-tested from 1999. This is used to include both bull and bear markets.

Performance and Risk Metrics

The performance of the model CAN SLIM portfolios are examined by looking at their performance over the timespan of the back-test, as well as by examining their average annualized return. Several measures are used to measure and consider the risk of the model CAN SLIM portfolios. The maximum drawdown, a measure of the worst period or lowest return for the portfolio are calculated for both the model OPBM II portfolios and the relevant benchmark, the NASDAQ 100. The standard deviation of the monthly returns of both portfolios are calculated as well. Likewise, the Sharpe ratio is used to measure risk-adjusted performance. The Sharpe ratio is calculated by subtracting the risk-free rate of return from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio return. The Sharpe ratio determines whether a portfolio's returns are due to smart investment decisions or simply due to high risk taking. Finally, alpha, a measure of performance on a risk-adjusted basis, is used to examine any excess return on the model OPBM II portfolios compared to its benchmark, the NASDAQ 100. Using these risk metrics, it can be determined whether or not the OPBM II strategy (or any strategy) is more efficient than the defined benchmark. In a previous version of the OPBM strategy, Lutey et al. (2013) did not include alpha which has been included in this paper to define to what extent the excess returns of the model portfolio are greater than (or less than) the benchmark.

Results

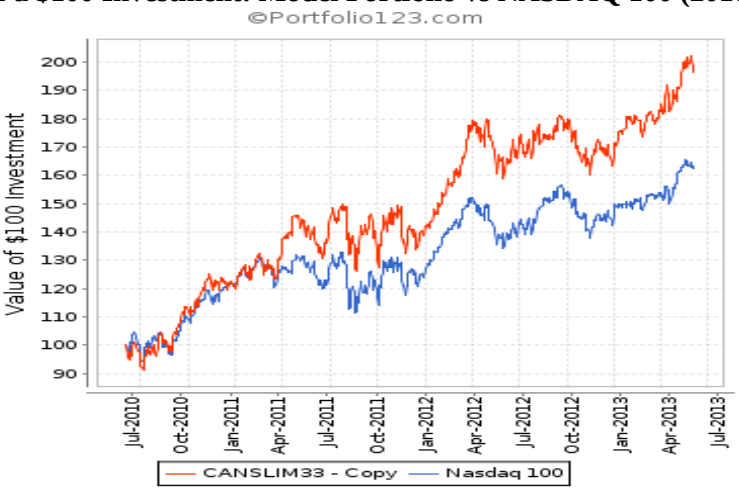
Results- 2010 Inception

The strategy showed 96.26% total return for the model portfolio, versus its benchmark (NASDAQ 100) return of 62.32%. Thus a $100 investment, at the end of three years would be worth $196 dollars using the OPBM II strategy (Figure 1). The portfolio holdings can be seen in Table 1. That same investment would be worth $165 using a buy and hold strategy using the overall NASDAQ 100 index. The average annualized return for the model portfolio was 25.20% from 2010-2013. The average annualized return for the benchmark over the same time period was 19.8%.

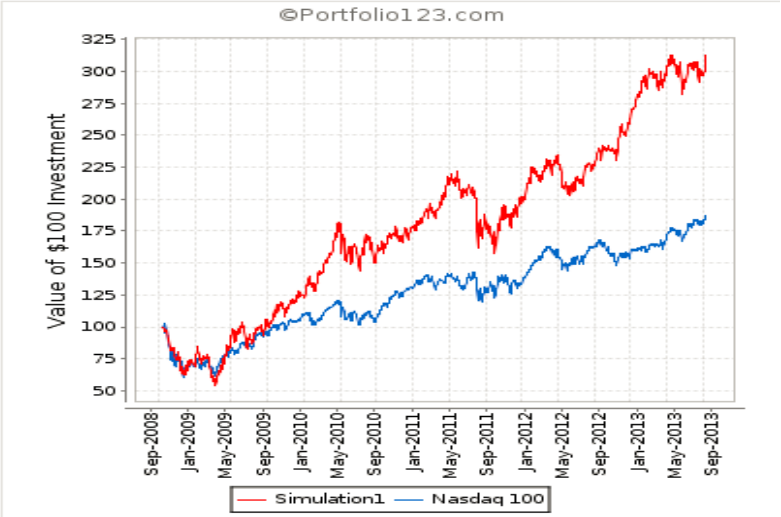
The model portfolio had a maximum drawdown of 15.63%, this is compared with the benchmark's draw down of 16.11%. The model portfolio showed a standard deviation of returns of 25.78%; the benchmark standard deviation for the same time period was 53.79%. The model portfolio showed a Sharpe ratio of 0.90. This can be compared with the benchmark's Sharpe ratio of 0.33.

FIGURE 1
MODEL PORTFOLIO VS NASDAQ 100

Value of a $100 Investment: Model Portfolio vs NASDAQ 100 (2010-2013)



Value of a $100 Investment: Model Portfolio vs NASDAQ 100 (2008-2013)



Value of a $100 Investment: Model Portfolio vs NASDAQ 100 (1999-2013)

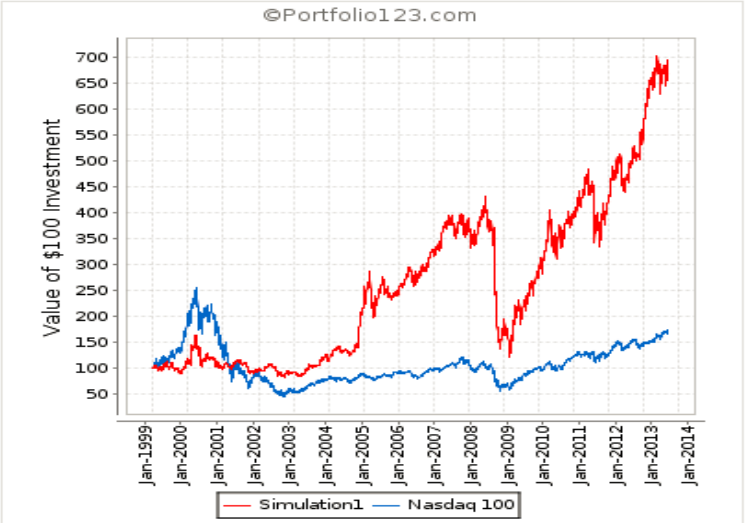


TABLE 1
MODEL PORTFOLIO HOLDINGS

Model Portfolio Holdings, 2010 Inception

Holdings - Current

	Ticker		Weight	Return	Return $	Rank	Shares	Avg Shr Cost	Current Price	Value	Days Held
1	AAPL	[5d] [1y]	7.8%	85.47%	7,039.77	61.1	34.0	$242.26	$449.31	$15,276.54	1,010
2	ALXN	[5d] [1y]	4.8%	39.52%	2,674.07	77.1	102.0	$66.34	$92.56	$9,441.12	555
3	AMZN	[5d] [1y]	10.8%	138.66%	12,349.74	5.2	80.0	$111.33	$265.70	$21,256.00	1,065
4	BIDU	[5d] [1y]	6.3%	37.97%	3,383.79	86.6	128.0	$69.62	$96.06	$12,295.68	1,065
5	BIIB	[5d] [1y]	17.2%	285.93%	25,071.53	76.6	154.0	$56.94	$219.74	$33,839.96	1,038
6	CELG	[5d] [1y]	10.5%	129.38%	11,624.85	55.6	175.0	$51.34	$117.77	$20,609.75	1,065
7	ISRG	[5d] [1y]	7.4%	95.65%	7,068.72	90.2	29.0	$254.84	$498.59	$14,459.11	919
8	KLAC	[5d] [1y]	5.2%	48.75%	3,323.89	55.7	178.0	$38.31	$56.98	$10,142.44	611
9	PCLN	[5d] [1y]	22.4%	342.05%	33,990.56	79.5	55.0	$180.68	$798.69	$43,927.95	1,094
10	VOD	[5d] [1y]	6.6%	39.42%	3,673.74	51.4	443.0	$21.04	$29.33	$12,993.19	1,087

Model Portfolio Holdings, 2008 Inception

Holdings - Current

	Ticker		Weight	Return	Return $	Rank	Shares	Avg Shr Cost	Current Price	Value	Days Held
1	AHT	[5d] [1y]	20.0%	1,177.24%	56,338.78	96.1	5,002.0	$0.96	$12.22	$61,124.44	1,649
2	FPO	[5d] [1y]	3.1%	95.65%	4,576.45	83.6	740.0	$6.47	$12.65	$9,361.00	1,649
3	KIRK	[5d] [1y]	5.4%	310.91%	12,432.81	83.4	882.0	$4.53	$18.63	$16,431.66	1,628
4	MFCSF	[5d] [1y]	10.9%	2.86%	929.05	99.5	2,208.0	$14.70	$15.12	$33,384.96	158
5	NNI	[5d] [1y]	5.0%	69.95%	6,260.94	97.8	402.0	$22.27	$37.84	$15,211.68	655
6	NRF	[5d] [1y]	7.2%	368.01%	17,256.97	93.4	2,425.0	$1.93	$9.05	$21,946.25	1,642
7	RGR	[5d] [1y]	16.6%	473.26%	42,068.07	98.4	873.0	$10.18	$58.37	$50,957.01	1,369
8	RPT	[5d] [1y]	7.1%	288.87%	16,201.03	16.4	1,432.0	$3.92	$15.23	$21,809.36	1,754
9	SKT	[5d] [1y]	12.5%	73.38%	16,223.14	84.7	1,186.0	$18.64	$32.32	$38,331.52	1,446
10	SLM	[5d] [1y]	10.6%	54.29%	11,373.14	98.3	1,298.0	$16.14	$24.90	$32,320.20	410

Model Portfolio Holdings, 1999 Inception

Holdings - Current

	Ticker		Weight	Return	Return $	Rank	Shares	Avg Shr Cost	Current Price	Value	Days Held
1	AHT	[5d] [1y]	21.8%	1,187.21%	141,283.75	96.1	12,454.0	$0.96	$12.30	$153,184.20	1,652
2	FPO	[5d] [1y]	3.3%	96.36%	11,461.79	83.6	1,842.0	$6.46	$12.68	$23,356.56	1,652
3	KIRK	[5d] [1y]	4.5%	195.97%	20,920.94	83.3	1,720.0	$6.21	$18.37	$31,596.40	1,582
4	NNI	[5d] [1y]	4.8%	68.21%	13,751.55	97.8	906.0	$22.25	$37.43	$33,911.58	658
5	NRF	[5d] [1y]	7.6%	369.12%	42,073.62	93.5	5,902.0	$1.93	$9.06	$53,472.12	1,645
6	RGR	[5d] [1y]	18.1%	484.46%	105,441.42	98.4	2,139.0	$10.18	$59.47	$127,206.34	1,372
7	RPT	[5d] [1y]	7.3%	292.85%	38,188.01	16.5	3,333.0	$3.91	$15.37	$51,228.21	1,757
8	SKT	[5d] [1y]	12.3%	73.91%	36,885.61	84.8	2,678.0	$18.64	$32.41	$86,793.98	1,449
9	SLM	[5d] [1y]	10.7%	53.53%	26,358.52	98.3	3,052.0	$16.13	$24.77	$75,598.04	413
10	VNO	[5d] [1y]	5.0%	3.86%	1,306.68	99.9	416.0	$81.41	$84.55	$35,172.80	28
11	WTM	[5d] [1y]	4.4%	333.93%	23,773.49	54.3	54.0	$131.84	$572.09	$30,892.86	4,893

Results – 2008 Inception

Over a longer timeframe (September 2008 – September 2013) the system still shows impressive results turning a $100 initial investment to over $306 (Figure 1). The portfolio holdings can be seen in

Table 1. This can be compared with the benchmark's $100 initial investment valued at $160. The model portfolio boasts a mean annualized return of 25.13% compared to the Nasdaq 100 return of 12.45%. This shows that on average, the model portfolio returns an annualized Alpha of 12.88%.

The model portfolio shows a maximum drawdown of 44.76% compared with the benchmark's maximum drawdown of 40.60%. The model portfolio shows a standard deviation of 38.39%. The standard deviation for the NASDAQ 100 over this time was 31.08%. This suggests there is greater volatility among returns in the model portfolio than the NASDAQ 100 during this interval. In order to determine if the model portfolio is truly better than the benchmark (per unit of risk) the Sharpe ratio is considered. The model portfolio shows a high Sharpe ratio at 0.59. This is compared to the Nasdaq 100's Sharpe of 0.34. This concludes that the model portfolio using the OPBM II modified CAN SLIM strategy is a stronger performer (per unit of risk) than the benchmark index.

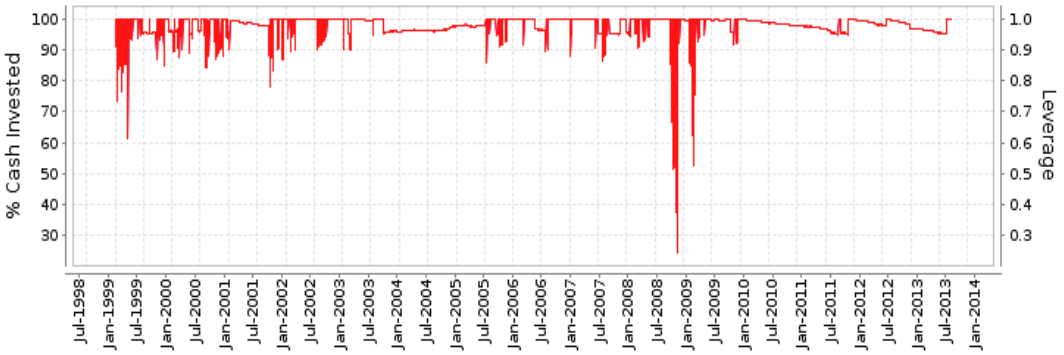
Results – 1999 Inception

The last back-test used 1999 as the inception date in order to incorporate the dot.com bubble, the bull market from 2004-2008, and the crash from 2008-2009. Thus, this back-test compares the OPBM II strategy to the Nasdaq 100 over both cyclical bear and bull markets. As can be seen in Figure 1, the model portfolio in this system shows a total return of 604.38% over the 14 year period; compared to 73.41% for the NASDAQ 100. The model portfolio shows an average annual return of 14.21%, compared to the NASDAQ 100 of 3.82%.

The model portfolio shows a maximum drawdown of 71.88%, this is compared with the benchmark's maximum drawdown of 82.90%. The model portfolio shows a lower standard deviation (36.90%) compared to the NASDAQ 100 (38.36%). This lower standard deviation shows lower volatility among returns. The Sharpe of the model portfolio (0.27) is greater than the Nasdaq 100 (-0.01). The Nasdaq 100's negative Sharpe ratio indicates poor risk-adjusted performance over the 14 year period. Thus, the model portfolio using the modified CAN SLIM strategy outperforms the NASDAQ 100 on a risk-adjusted basis.

The graph in Figure 2 shows the model portfolio compared to the NASDAQ 100 in terms of a $100 initial investment, and total percentage drawdown since the 1999 hypothetical inception. It also shows the percentage of cash invested throughout the life of the back-test. During the 2008-2009 span when both indicies performed poorly due to the economic crisis, the percentage cash invested went down substantially. This is another CAN SLIM method of compensating for poor market conditions. While the simulation was not intentiionally (or knowingly) programed to do this, the results do make sense. Reducing exposure to poor economic or market conditions reduces overall risk and saves capital for strong markets.

FIGURE 2
PERCENTAGE OF CASH INVESTED



CONCLUSION

This paper describes a simplified version of O'Neil's (2009) CAN SLIM investing strategy (OPBM II) that can be used by individual investors using simple stock screening tools. Over three separate timespans examined, the OPBM II strategy outperformed the NASDAQ 100 by selecting superior companies and allocating a greater percentage of capital towards strong potential winners. Furthermore, the strategy typically reduced risk by under-allocating positions and conserving cash in weak or bear markets. Whiles this modified CAN SLIM strategy performed favorably compared to the NASDAQ 100 benchmarks over three and five year timespans, it performed extremely well in comparison to the NASDAQ 100 during the fourteen year timespan of 1999- 2013. This indicates that this modified CAN SLIM strategy may be a particularly effective tool for long-term investors.

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