AIQ Opening Bell Newsletter

April 2004 Vol. 13 Issue 4

In This Issue

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Current Backtest Results for EDS Models

How Have Our Published EDS Models Performed? 'Very Good' to 'Impressive'

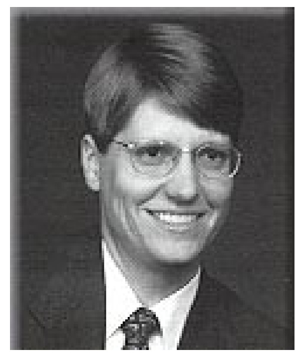
By David Vomund

Since AIQ's Expert Design Studio (EDS) was released in 1998, we've created several trading strategies and published them in the *Opening Bell*. Each strategy had an extremely good backtest when it was created. Creating models with good backtests is the easy part, however. The bigger issue is how the models have performed after they were created and introduced in this publication.

"Creating models with good backtests is the easy part…The bigger issue is how the models have performed after they were created and introduced in this publication."

Of the strategies that we've published, some buy stocks into strength and some buy stocks into weakness. Some are for active trading systems while others hold stocks for several weeks. At the start of each year, we update their performance. Let's see how the models have performed to date.

For all the tests in this article, we used a database consisting of the S&P 500 stocks combined with the Nasdaq 100 stocks. The result is a list file of about 540 stocks. We chose to run the models on this list because the stocks represent established stocks with good liquidity. Running backtests on a broad database of stocks can overstate results because the worst performing stocks tend to be removed from the database.



DAVID VOMUND

In this article, AIQ's Expert Design Studio backtests are applied to models that were published in the *Opening Bell*. We are evaluating each model's ability to pick winning trades. We are not evaluating the models as complete trading systems. For that, use AIQ's Portfolio Simulator that includes the use of capitalization rules.

Divergence Model
Published April 1998

One of our first EDS models was published in the April 1998 *Opening Bell*. This model looks for positive divergences in OBVpct and Money

Flow. In addition, it requires the RSI Wilder to be greater than 50, the MACD to be above its Signal Line, and Money Flow RSI to be above 70.

This model was created shortly after AIQ released EDS and we've since created more powerful models, but this strategy continues to have respectable returns.

To test the strategy, we used a database of the S&P 500 stocks combined with the Nasdaq 100 stocks. The sell parameters were a 90% Capital Protect and 90% Profit Protect when there was a 5% profit.

A test run from April 1998 to current shows 154 trades with an average gain per trade of 2.03%. If you were to buy the S&P 500 instead of the stocks, the average gain per trade would have only been 0.02%. The average holding period was 24 calendar days.

This model has maintained its effectiveness since the time it was published. The only downside is that there are few trades. In 2003 there were only 15 trades. They were good trades, however. The average gain per trade was 4.21%.

AIQ Opening Bell Newsletter

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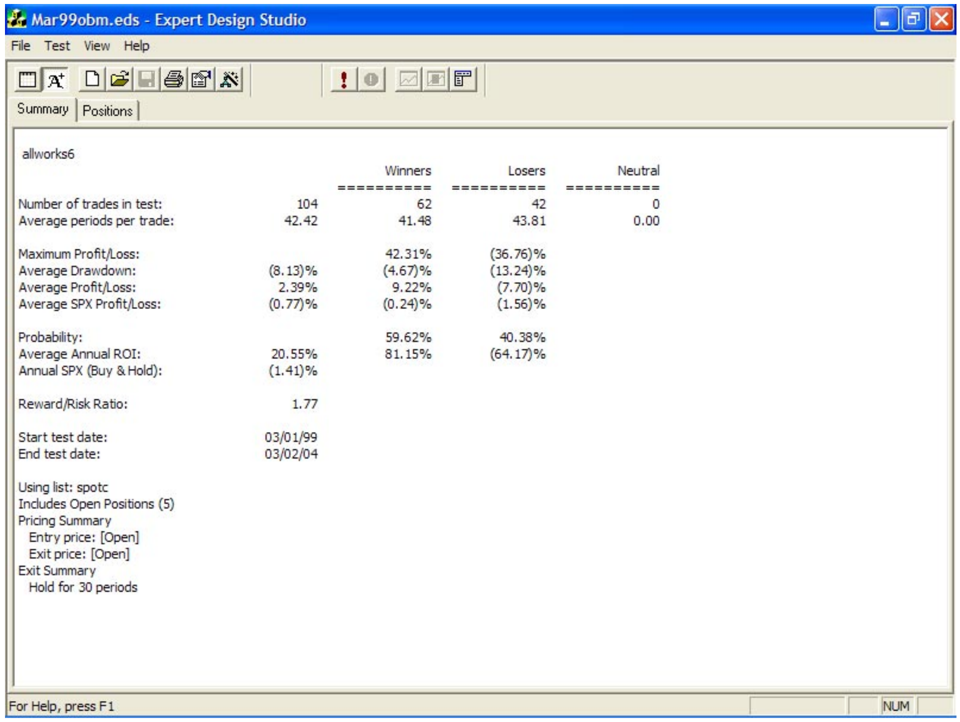


Mar99obm.eds - Expert Design Studio

File Test View Help

Summary Positions

allworks6

		Winners	Losers	Neutral
Number of trades in test:	104	62	42	0
Average periods per trade:	42.42	41.48	43.81	0.00
Maximum Profit/Loss:		42.31%	(36.76)%	
Average Drawdown:	(8.13)%	(4.67)%	(13.24)%	
Average Profit/Loss:	2.39%	9.22%	(7.70)%	
Average SPX Profit/Loss:	(0.77)%	(0.24)%	(1.56)%	
Probability:		59.62%	40.38%	
Average Annual ROI:	20.55%	81.15%	(64.17)%	
Annual SPX (Buy & Hold):	(1.41)%			
Reward/Risk Ratio:	1.77			
Start test date:	03/01/99			
End test date:	03/02/04			

Using list: spotc
Includes Open Positions (5)
Pricing Summary
Entry price: [Open]
Exit price: [Open]
Exit Summary
Hold for 30 periods

For Help, press F1 NUM

Figure 1. EDS screen displays report summarizing results from Growth Model backtest. For five-year period (1999-2004) test showed an avg. gain per trade of 2.39%.

Growth Model

Published March 1999

In March 1999, we ran a timely article that contained an EDS model for growth investors. Growth investors buy into strength rather than trying to pick lows. The theory is that what is high often goes higher. Therefore, the key component in our Growth Model is that the stock must be above its 28-day ESA for all of the previous 60 days. Only stocks that experience a strong rally can accomplish this.

Having a stock remain above its 28-day moving average for 60 days backtested well, but in the original article we added the criterion that the stock must be below its upper AIQ Trading Band. This eliminated stocks that had run too far. In addition, we added a rule stating that the Volume Accumulation Percent indicator must be above 30.

The year 1999 was a great year for growth investors but that wasn't the case in 2000 to 2002. So how has the model performed over those years?

"A test (of our Growth Model) was run from March 1999 to March 2004… There were 104 trades with an average gain per trade of 2.39%. That's a great return considering growth stocks underwent one of the biggest bear markets ever."

A test was run from March 1999, the date the model was published, to March 2004. A fixed 30-day holding period was used, the same as in the original article. The backtest results are found in **Figure 1**. There were 104 trades with an average gain per trade of 2.39%. That's a great return considering growth stocks underwent one of the biggest bear markets ever. If you were to invest in the S&P 500 instead of the selected stocks, the average trade would have lost 0.77%.

This model, in effect, has market timing built into it. When times are good a lot of stocks pass the criteria. When stocks are falling, however, few stocks pass the model's criteria. That doesn't mean there were no trades during the bear market. A test from the bull market high in March 2000 to the bear market low in March 2003 shows 39 trades with an average gain per trade of 1.82%. By trading the S&P 500, the average trade would have lost 4.72%. That's impressive.

Citizen Kane Model

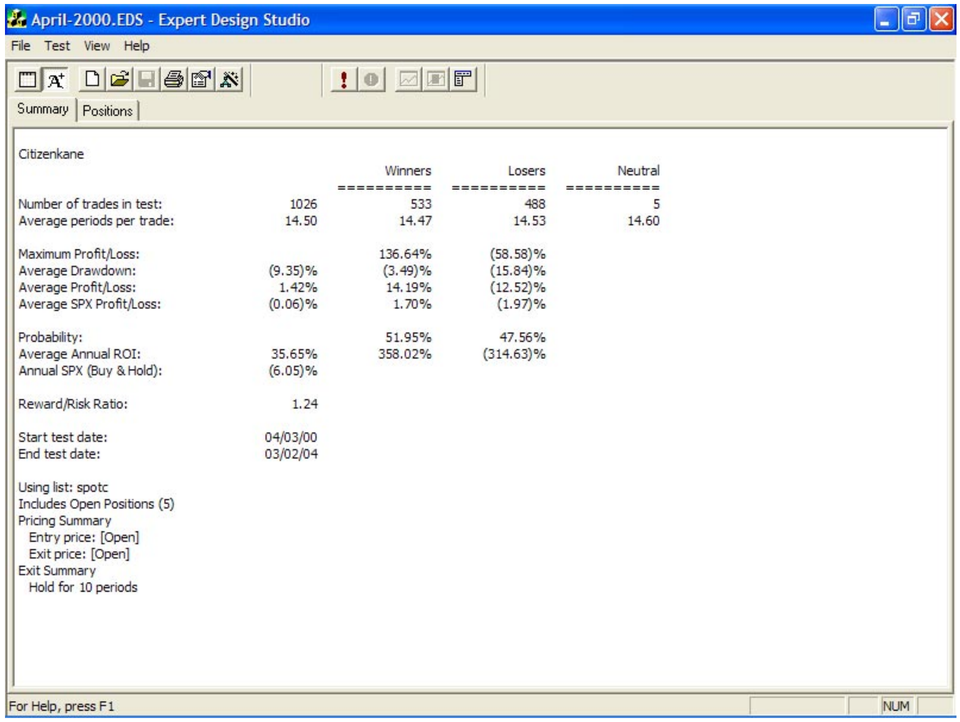
Published April 2000

In April of 2000, we created what we believed was our best EDS model. Appropriately, we named the model Citizen Kane, a movie many consider to be the best of all time. The foundation of the model is a rule that states that the stock must have corrected by at least 30% sometime between 10 and 50 days ago. This is a bottom-fishing model.

In addition to this rule, two rules using the Volume Accumulation Percent indicator (VApct) were added. The first rule states that the VApct indicator must have a value greater than zero. The second rule states that the 45-day slope of VApct must be positive.

We tested this model from April 2000, the date it was created, and used a fixed holding period of 10 days. **Figure 2** shows the results. Despite starting the test at the start of a three-year bear market, the average return per trade was 1.42% compared to a small loss in the S&P 500. The average holding period was 14 days and the number of trades was 1026.

As noted above, this is a bottom fishing model and as such it lost some effectiveness during the bear market. During that time, many stocks passed the criteria requiring the stock to correct by at least 30%. Now that a 30% correction is a rare event, the model is more effective. Running our test for the year 2003 shows 34 trades with an average gain per trade of 7.56%!



April-2000.EDS - Expert Design Studio

File Test View Help

Summary Positions

Citizenkane

		Winners	Losers	Neutral
Number of trades in test:	1026	533	488	5
Average periods per trade:	14.50	14.47	14.53	14.60
Maximum Profit/Loss:		136.64%	(58.58)%	
Average Drawdown:	(9.35)%	(3.49)%	(15.84)%	
Average Profit/Loss:	1.42%	14.19%	(12.52)%	
Average SPX Profit/Loss:	(0.06)%	1.70%	(1.97)%	
Probability:		51.95%	47.56%	
Average Annual ROI:	35.65%	358.02%	(314.63)%	
Annual SPX (Buy & Hold):	(6.05)%			
Reward/Risk Ratio:	1.24			
Start test date:	04/03/00			
End test date:	03/02/04			

Using list: spotc
Includes Open Positions (5)
Pricing Summary
Entry price: [Open]
Exit price: [Open]
Exit Summary
Hold for 10 periods

For Help, press F1 NUM

Figure 2. EDS summary report with results from backtest of Citizen Kane model. For four-year period (2000-2004) test showed an avg. gain per trade of 1.42%.

Extreme Growth Model

Published December 2000

In the December 2000 *Opening Bell*, we created a model that bought into high-flying stocks. The model is very simple. The model looks for stocks that have increased in value by at least 50% in the last 66 business days but have stalled or moved lower for the last 10 days. In addition, the Volume Accumulation Percent indicator must be above 25. Stocks that pass this model are obviously very volatile.

In the 1990s there were a lot of stocks that rose by at least 50% in the last 66 days. After this model was created in December 2000, fewer stocks passed the model because of the bear market. As the market recovers, so does the number of stocks that pass the screening.

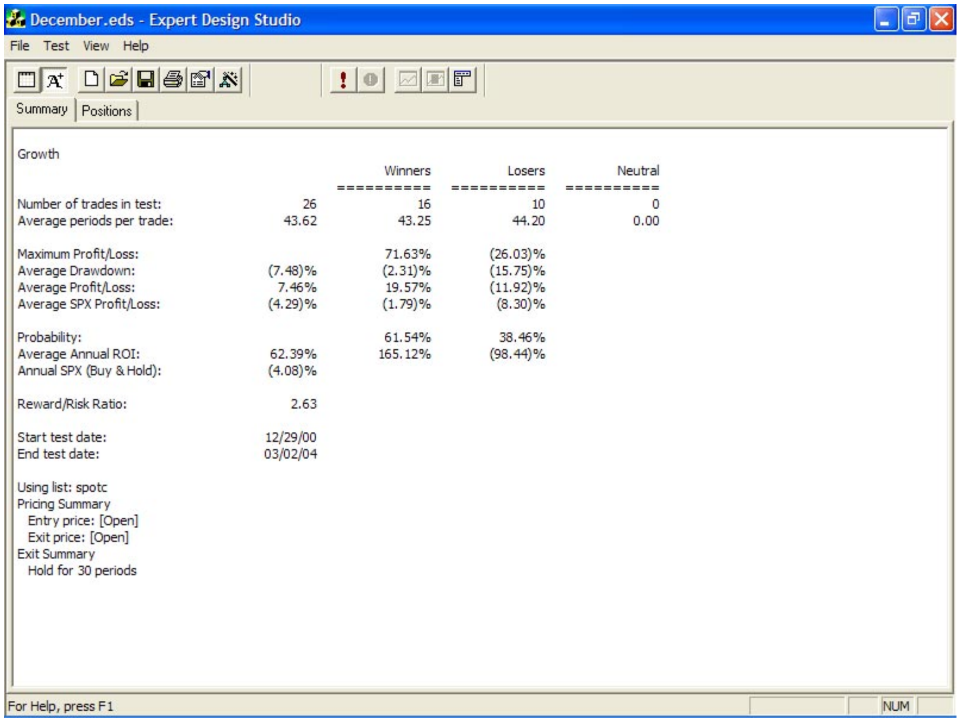
We ran a test from December 2000, the month the model was published, to March 2004 using a fixed 30-day holding period. **Figure 3** shows the results. There were 26 trades. The average trade gained 7.46% compared to an average loss of 4.29% in the S&P 500. Most of that gain came in 2003.

"In April of 2000, we created what we believed was our best EDS model…we named the model Citizen Kane, a movie many consider to be the best of all time. Running our test (on this model) for the year 2003 shows 34 trades with an average gain per trade of 7.56%!"

Using this model over time, we've learned that the VApct rule eliminates too many trades. By removing the VApct rule, the number of trades in our backtest increases from 25 to 260. In our financial work, we've eliminated the VApct rule and instead use it as a tiebreaker. That is, when a number of stocks pass the test but only one can be purchased, then purchase the one with the highest VApct indicator.

As this is one of our favorite models, we decided to get a better feel for how a portfolio would have performed by using AIQ's Portfolio Simulator. Rather than assuming all trades are acted on, the Portfolio Simulator uses capitalization rules.

We stated that 10 stocks was a fully invested portfolio with each new position being 10% of the



December.eds - Expert Design Studio

File Test View Help

Summary Positions

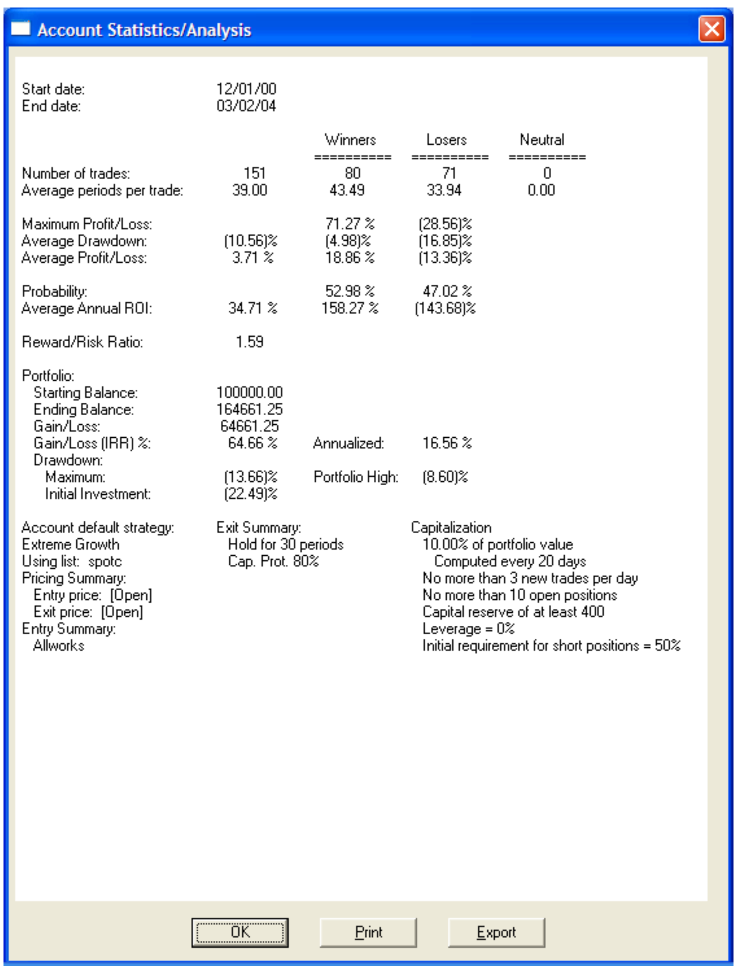
Growth

		Winners	Losers	Neutral
Number of trades in test:	26	16	10	0
Average periods per trade:	43.62	43.25	44.20	0.00
Maximum Profit/Loss:		71.63%	(26.03)%	
Average Drawdown:	(7.48)%	(2.31)%	(15.75)%	
Average Profit/Loss:	7.46%	19.57%	(11.92)%	
Average SPX Profit/Loss:	(4.29)%	(1.79)%	(8.30)%	
Probability:		61.54%	38.46%	
Average Annual ROI:	62.39%	165.12%	(98.44)%	
Annual SPX (Buy & Hold):	(4.08)%			
Reward/Risk Ratio:	2.63			
Start test date:	12/29/00			
End test date:	03/02/04			

Using list: spotc
Pricing Summary
Entry price: [Open]
Exit price: [Open]
Exit Summary
Hold for 30 periods

For Help, press F1 NUM

Figure 3. EDS backtest results for Extreme Growth model. For test period 12/00 to 03/04, model showed an avg. gain per trade of 7.46%.



Account Statistics/Analysis

Start date: 12/01/00
End date: 03/02/04

		Winners	Losers	Neutral
Number of trades:	151	80	71	0
Average periods per trade:	39.00	43.49	33.94	0.00
Maximum Profit/Loss:		71.27 %	(28.56)%	
Average Drawdown:	(10.56)%	(4.98)%	(16.85)%	
Average Profit/Loss:	3.71 %	18.86 %	(13.36)%	
Probability:		52.98 %	47.02 %	
Average Annual ROI:	34.71 %	158.27 %	(143.68)%	
Reward/Risk Ratio:	1.59			

Portfolio:
Starting Balance: 100000.00
Ending Balance: 164661.25
Gain/Loss: 64661.25
Gain/Loss (IRR) %: 64.66 % Annualized: 16.56 %
Drawdown:
Maximum: (13.66)% Portfolio High: (8.60)%
Initial Investment: (22.49)%

Account default strategy: Extreme Growth
Using list: spotc
Pricing Summary:
Entry price: [Open]
Exit price: [Open]
Entry Summary:
Allworks

Exit Summary:
Hold for 30 periods
Cap. Prot. 80%

Capitalization
10.00% of portfolio value
Computed every 20 days
No more than 3 new trades per day
No more than 10 open positions
Capital reserve of at least 400
Leverage = 0%
Initial requirement for short positions = 50%

OK Print Export

Figure 4. Portfolio Simulation test results for Extreme Growth Model. For the three-year, four-month period ending 03/04, model portfolio gained 64%.

portfolio value. No more than three stocks could be traded per day and we didn't double into a stock. The Ameritrade commission rate was used and stocks were bought and sold the day after the signal. As before, the database used was the S&P 500 stocks combined with the Nasdaq 100 stocks. The sell strategy was a fixed 30-day holding period combined with an 80% Capital Protect. The model was run without the VApct rule.

The result of using the Portfolio Simulator is found in **Figure 4**. From December 2000 to March 2004, the portfolio grew 64%. This came at a time when the S&P 500 fell 12% and the Nasdaq Composite fell 22%!

If that doesn't catch your attention, look at the graph of the portfolio along with the S&P 500 index (**Figure 5**). The portfolio was just about unchanged during the bear market but resumed its extreme growth pattern once the market environment improved.

Tweezer Bottom

Published December 2002

In December 2002 we created an EDS model based on a "Tweezer Bottom" candlestick charting pattern. A Tweezer Bottom occurs when a security has two days with the same low price. Our model requires the same low price to occur on consecutive days. As a secondary filter, the stock must also have a red down arrow on AIQ's Color Barometer for the RSI AIQ indicator. This occurs when the RSI AIQ indicator is above 70 or below 30.

The market has been very strong since this model was purchased so it's not surprising to see profitable results. The selections from this model, however, were well above equivalent trades in the S&P 500. Using a fixed 22-day holding period, the average trade gained 4.55% compared to a 1.82% gain in the S&P 500 (**Figure 6**).

Volume Spike

Published August 2003

Last August, we published an EDS model that looks for volume spikes. Of all the indicator rules, we surprisingly found that a volume spike tested well as a bullish rule. To help our comfort level, we then required the stock to close in the upper half of its trading range the day of the spike. Finally, the model requires the RSI Wilder to be below 30. It is too early to evaluate the performance of this model. Since it was published, there were 31 trades with an average gain of just under 1% using a fixed 5-day holding period.

Figure 5. Portfolio Simulation graph showing comparison of Extreme Growth Model portfolio ROR vs. ROR of S&P 500 index.

"Since the Extreme Growth Model is one of our favorite models, we decided to get a better feel for how a portfolio would have performed by using AIQ's Portfolio Simulator...From December 2000 to March 2004, the portfolio grew 64%."

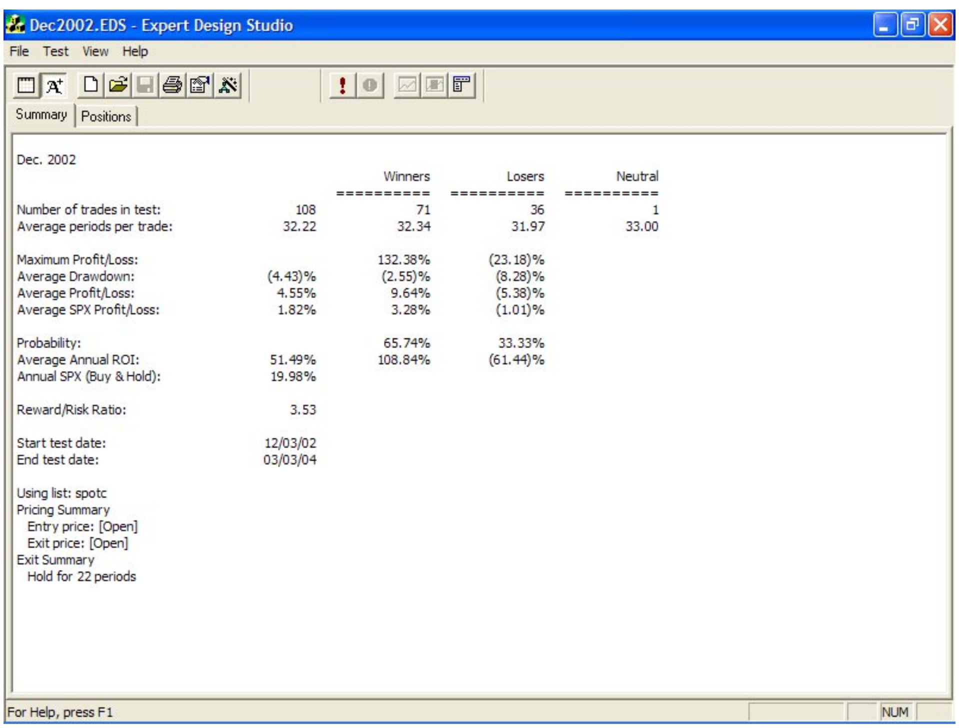


Figure 6. Backtest results for the Tweezer Bottom model. For 15-month test period ending 03/03/04, the model showed an avg. gain per trade of 4.55% vs. 1.82% for the S&P 500 index.

Summary

In reviewing the models that we've published in the *Opening Bell*, it's nice to see that so many have continued to perform well after they were published. They weren't overoptimized.

These are backtests, however, and actual returns would be different. Past performance does not guarantee future results.

Most of our models gave a low number of trades. This can be remedied by running the models on a larger database of stocks. All of our tests were run on a database of approximately 550 heavily traded stocks.

David Vomund publishes VIS Alert, a weekly investment newsletter. For a sample copy, call 775-831-1544 or go to *www.visalert.com*.

New Exchange Traded Fund

Shift To This Value Oriented ETF When Value Investing Is In Favor

By David Vomund

Most traders focus on volatile stocks that are highly liquid. That's true whether you are a growth investor or a swing trader. That's why many of the largest stocks on the Nasdaq are so popular. Few traders play value stocks. Their high yield and low volatility are more suited for buy-and-hold investors.

If traders typically concentrate on volatile growth stocks, then what do they do when growth investing is out of favor? Swing traders may short these stocks but many people only go long securities. As a growth investor, I know that I struggle during times when value stocks outperform growth stocks. Often, I apply my growth stock selection techniques to a database of value-oriented stocks. Results are mixed.

Now there is a new Exchange Traded Fund (ETF) that can play an important role for traders during times when value investing is in favor. Last November, iShares opened the Dow Jones Select Dividend Index Fund (DVY). This ETF is comprised of 50 of the highest dividend-yielding securities (excluding REITs) in the Dow Jones total market index. Its yield is about 3.2%. There are other value oriented ETFs but the DVY represents the best pure play on high yielding stocks.

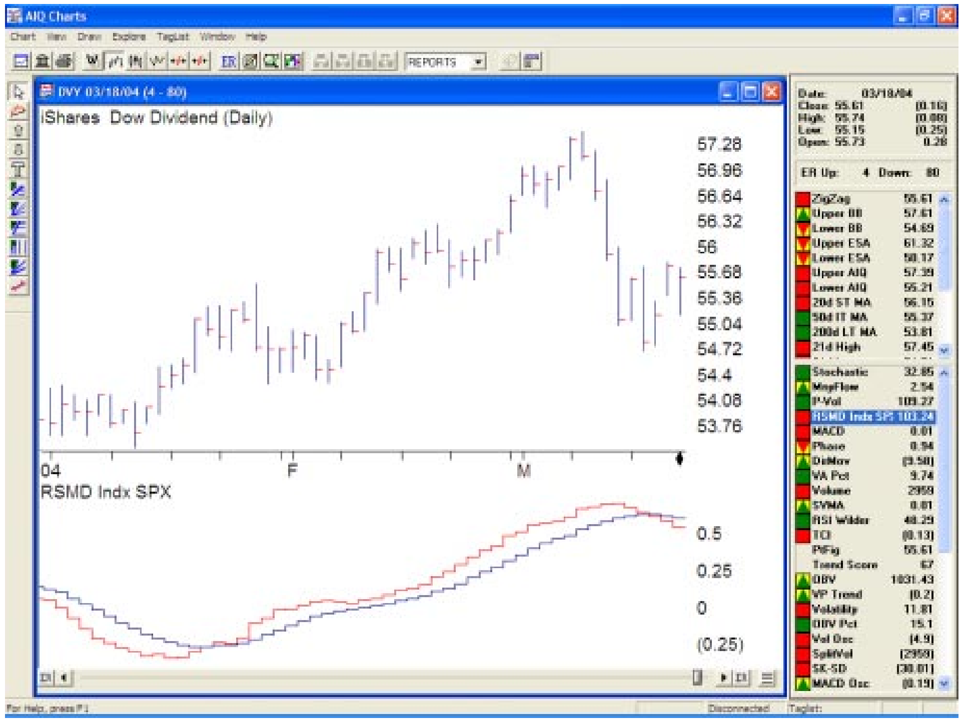


Figure 1. Daily chart of iShares DVY Exchange Traded Fund (ETF) with the RSMD indicator plotted in the lower window. The DVY is comprised of 50 of the highest dividend-yielding securities.

Here is how this ETF can be in important tool. Growth stocks outperformed in most of 2003. That changed in late January. At that time, the Nasdaq reached its top and has since stair-stepped lower in a pattern of lower highs and lower lows. That's why this year has been a more difficult trading environment than that of 2003. While the Nasdaq was moving lower, the S&P 500 and the Dow Jones Industrial Average began drifting sideways. Money was shifting to more conservative value-oriented stocks. Instead of fighting a falling market, growth investors can shift some funds to the DVY and wait for the environment to improve.

DVY has only four months of data so incorporating this security in a backtest is impossible. With AIQ, you can build a group based on its holdings. Its 50 holdings can be found at *www.ishares.com*.

In this article, I will present two trading strategies that switch between the DVY (representing value securities) and the QQQ (representing growth securities). The strategies work well with other securities and there is no reason they won't work with these two ETFs.

> **"Last November, iShares opened the Dow Jones Select Dividend Index Fund (DVY) comprised of 50 of the highest dividend-yielding securities (excluding REITs) in the Dow Jones total market index."**

Strategy #1 – RSMD Indicator

The highly effective RSMD indicator can be used to switch between the two securities. In Data Manager, we set the relative strength setting on the DVY to QQQ. If you are adding DVY to your database, then type QQQ in the empty box next to *Relative Strength Symbols – Ticker*. That way, when DVY is plotted, we can see this security's relative strength indicator relative to the QQQ.

The RSMD indicator is unique to AIQ and is not the traditional relative strength indicator. Instead, it is the relative strength plugged into the MACD formula. In effect, it is the momentum of relative strength.

Figure 1 shows a graph of the DVY along with its RSMD indicator. When the indicator is rising, then high yielding stocks are outperforming the growth oriented stocks as represented by the QQQ. Conversely, when the indicator is falling, that implies growth stocks are in favor and your funds should be in the aggressive QQQ.

Figure 1 shows that you would be in the QQQ until mid-January, when funds would switch to the DVY. Instead of falling with other growth stocks, your portfolio would have risen through early March. More recently the indicator has begun to fall, requiring funds to be shifted back to the QQQ.

This is a daily indicator so it is subject to whipsaws. With this ETF strategy, however, it only takes two trades to fully shift the funds. That's a big advantage to trading a portfolio of stocks.

Strategy #2 – 15-Day Price Change Report

This strategy uses AIQ's Price Change Report to rotate between the two ETFs, the DVY and the QQQ. To run the strategy, change the time period used on AIQ's Price Change-Short Term report to 15 days. Then, each Friday run this report on a list of the two ETFs. Funds are invested in the top performing ETF.

With this approach, the QQQ was the top performer until January 30, when the DVY reached the top spot. As of this writing, DVY still holds the top spot.

This strategy assumes you are always fully invested. An easy way to incorporate market timing is to require the ETF to be on the Price Change Upside report. That means it has risen in value over the last 15 days. If the best performing ETF appears on the Price Change Downside report, then the money market is held. This keeps you in cash during severe bear markets.

Summary

No investment style works all the time. Instead of trading one style all the time, it is best to rotate to the style that is working best. That can present a problem to technicians when high-yielding value stocks are in favor. These stocks rarely appear on our technical screens. Instead of running technical screens on value stocks, it may be better to buy the iShares Dow Dividend (DVY) Exchange Traded Fund. This security holds a basket of high yielding stocks.

STOCK DATA MAINTENANCE

The following table shows stock splits and other changes:

Stock	Ticker	Split/Div.	Approx. Date
Dicks Sporting Goods	DKS	2:1	04/06/04
Universal Securities	UUU	4:3	04/06/04
Ceradyne Inc.	CRDN	3:2	04/08/04
Gateway Financial	GBTS	5%	04/12/04
DataWatch Corp.	DWCH	2:1	04/12/04
Fossil Inc.	FOSL	3:2	04/12/04
Countrywide Financial	CFC	3:2	04/13/04
Crescent Financial	CRFN	20%	04/19/04
Hibbett Sporting	HIBB	3:2	04/19/04

Stock	Ticker	Split/Div.	Approx. Date
Amer Vanguard	AVD	3:2	04/19/04
Shuffle Master	SHFL	3:2	04/19/04
MainSource Financial	MSFG	3:2	04/19/04
United Natural	UNFI	2:1	04/20/04
Metal Mgmt.	MTLM	2:1	04/21/04
Fst. South Bancorp	FSBK	3:2	04/26/04
Aeropostale	ARO	3:2	04/27/04
Bank of Nova Scotia	BNS	2:1	04/29/04

Trading Suspended:

Concord EFS (CE), Medstone Int'l (MEDS), PMC Capital (PMC), Rainbow Technologies (RNBO)

Name Changes:

Anderson Group (ANDR) to Moscow CableCom Corp (MOCC)
Hughes Electronics (HS) to Direct TV Group Inc. (DTV)

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- Building trading systems using EDS
- Color Studies for Alerts
- Creating custom indicators

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Market Review

Market Corrects in March

At the start of March, it had been a year since the S&P 500 corrected even 5%. By the end of March, that changed. Uncertainty about the election, troubles overseas, the timing of a boost in interest rates, next year's profit growth, and soaring oil prices all weighed on the market. The S&P 500 started the month with a new yearly high but just two weeks later the index had corrected 5.6%. The more volatile Nasdaq Composite began its correction in late January. By mid-March the Nasdaq had fallen 11.7% from its highs.

Although most averages had fallen below important support levels, buyers emerged at the end of March. For the month, the S&P 500 fell 1.6% and the Nasdaq Composite fell 1.75%. For the quarter, the S&P 500 rose 1.3% while the Nasdaq Composite fell 0.4%.

With the market moving lower in March, it was not surprising to find Precious Metals as the best performing sector, rising 6%. The worst performing sector was Energy Services, falling 6%. Other weak sectors were Health Care falling 5%, Electronics falling 4%, and Biotechnology falling 4%.

S&P 500 Changes

Changes to the S&P 500 Index and Industry Groups:

Caremark Rx (CMX) replaces Tupperware Corp. (TUP). CMX is added to the Health Care Supplies (HEALTHSP) group.

M&T Bank Corp. (MTB) replaces Concord EFS (CE). MTB is added to the Banks (BANKGRP) group.

The ticker on Veritas Software changed from VRTS to VRTSE.

The ticker on R.R. Donnelley & Sons changed from DNY to RRD.