Special Report

HOT STOCKS

What Makes Stocks FLY and Others DIE

Dr Thomas Carr

aka DR STOXX

HOT STOCKS:

WHY SOME STOCKS FLY AND OTHERS DIE

Dr. Thomas K. Carr
(aka "Dr. Stoxx")

About the Author

Dr. Thomas K. Carr (aka "Dr. Stoxx") has been actively trading the markets since 1996 following several years of studying technical analysis. He holds a doctorate from Oxford University and for 16 years was a tenured Professor to liberal arts students. Among other academic publications, Dr. Carr is the author of three bestselling books on trading: *Trend Trading for a Living* (2007) – translated into Chinese, Korean and Japanese – *Micro-Trend Trading for Daily Income* (2010), and *Market-Neutral Trading* (2014). His market insights have been published in the *Wall Street Journal, Investors Business Daily*, and *US News and World Report*.

Dr. Stoxx has developed over 30 time-tested, proprietary trading systems that have proved to be profitable in all types of market conditions. These systems are based on the essentials of technical analysis, but also incorporate Dr. Stoxx's unique method of assessing the financial strength of companies, event-driven price movements, and general market trend dynamics. Highly skilled as a chart reader, Dr. Stoxx possesses an uncanny ability to time his entries and exits, often just prior to major market moves. He serves as a private trading coach, and his market letters have over 15,000 subscribers around the world. He publishes 6 daily letters, 3 weekly letters, and 1 monthly letter through his 3 websites:

- DrStoxx.com
- DrStoxxTrading.com
- IXTHYSLetter.com

About DrStoxxTrading.com

DrStoxxTrading.com (an affiliate of DrStoxx.com) is a wholly owned subsidiary service of Befriend the Trend Trading, LLC, founded by Dr. Thomas K Carr in October, 2002. DrStoxxTrading.com serves the needs of online traders and investors through a variety of advisory and trader-training products. The site offers two weekly market letters (THE HOT STOXX LETTER and THE PENNY STOXX LETTER), premium trader training resources (manuals and webinars), and a private coaching service.

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For more information on any of our stock pick advisory and trader training services, including topics covered in this Trading Manual, email us: support@drstoxx.com.

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Welcome from Dr. Stoxx!

Greetings, fellow trader! Thank you for buying this new trading manual. Great fortunes have been made using the principles taught in this manual. Nicolas Darvas famously built a $2million fortune in the 1940's using a version of this system. *Investors Business Daily* founder, William O'Neil, discovered that the best performing stocks in any market were the momentum stocks. I myself use what is taught here to regularly find great stocks for trading.

You will get the most out of this trading manual by following the following 4 steps:

- *read the manual carefully;*
- *take notes in your own words to confirm that you understand the manual;*
- *apply what you have learned by putting on "virtual" or "paper" trades;*
- *then, and only then, try putting on a few real-money trades.*

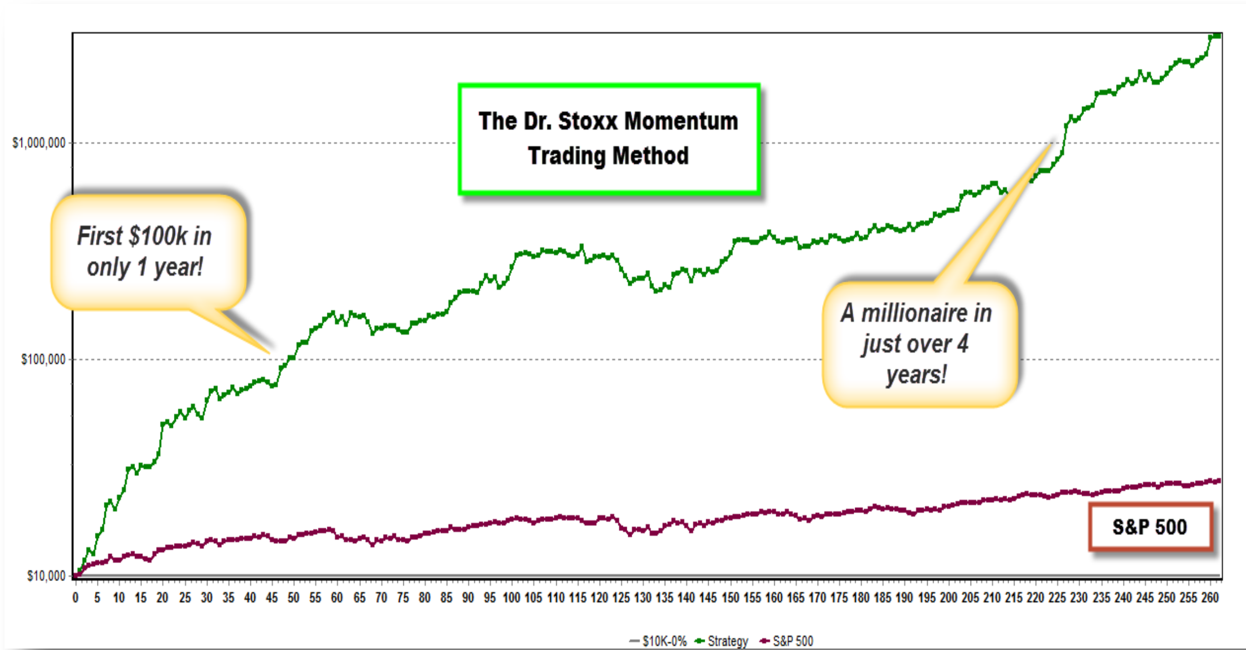
For this last step I strongly recommend you start small and go slowly. If you have any questions about anything in this manual, or about any of the other ways we at DrStoxxTrading.com help you become a successful trader, please do not hesitate to email us: support@drstoxx.com.

INTRODUCTION

Momentum has been defined as a force that *sustains* movement and *increases the strength* of that movement. This two-fold nature of momentum is seen in what traders and investors call "momentum stocks". A momentum stock is a stock that is trading in a sustained trend, either up or down, the strength of which is expected to increase over the near term.

Momentum stocks (defined more fully below) are among the most exciting stocks to trade. My own research, shared in this Manual, corroborates the general observation among traders and investors that momentum stocks produce the *greatest amount of return on investment* in the *least amount of time*.

Just how much return is possible with the right momentum system in hand? Let me show you. I have built a number of different momentum scans over the years. Some carry higher risk than others. Some work better in bull markets, some better in bear markets. The strongest performer among these is one of the systems I now use for one of our weekly advisory services – "The HOT STOXX Letter". This system is truly amazing; it shows extreme outperformance in all market conditions. Over a recent 5 year period (2009 - 2014), using a weekly rebalance period (explained below), and trading only the top 3 stocks that come up on the system's scanning tool, this system registered a gain of over **30,000%**. That is enough to turn an initial stake of only $10,000 into over $3 Million!



5-year gains of Carr's Momentum System (weekly rebalance) starting with only $10,000

To put that return in dollar perspective, let's say that at the beginning of this 5-year period (2009) you had $20,000 to invest in the market. You put half of that, $10,000, into a relative safe, large-cap index fund, and the other half into the top 3 stocks of Dr. Stoxx's Momentum Trading System, as listed in The HOT STOXX LETTER. Fortunately for you, after the markets bottomed out in March, 2009, the S&P 500 went on a strong bullish run from that point. Over the next 5 years it gained over 170%. This puts your original $10,000 at just over $27,000 today. That pretty good by anyone's standards! But what then happened to the other $10,000 invested with Dr. Stoxx? At the rate of return shown in our backtest, before commissions and taxes, your original investment is now worth, just five years later,

$3,091,235! When you add that to what you earned in your index fund, you would now have a total investment portfolio of over $3,118,000 before taxes and fees.

That is the power of trading momentum stocks. It can turn even a small amount of trading capital into something substantial, an amount of money that can make a real difference to your standard of living. We have subscribers to THE HOT STOXX LETTER who began trading with only $3,000, putting only about $1,000 into each of the 3 positions, and with compounded gains over time they are now well into the 5-figures in account size.

Another of the great advantages to trading momentum stocks is that as long as you rebalance your portfolio regularly, and as long as your momentum system gets you into only those stocks that are showing strong upward price strength, you stand a good chance of profiting even when the market takes a downturn. *Forbes* magazine states that, "Momentum strategies can help investors beat the market and avoid market crashes (Oct. 16, 2012)." This is to say that, when handled properly, momentum stocks can help you generate market-beating profits in rising bull markets and protect your profits more securely in volatile markets.

Momentum stocks are traditionally defined by their sustained and increasing movement in price, either up or down. Momentum stock strategies, in turn, are those stock trading strategies that scan the universe of stocks for those making the strongest gains (or losses) in the least amount of time. They recommend buying the strongest stocks in any given market and rotating your positions on a regular basis.

While trading momentum stocks can be one of the most rewarding approaches to the stock market, the way most people do it is is a recipe for disaster! ***Most momentum strategies fail!*** Yes, they can have incredibly profitable seasons. There are windows of opportunity for the price-chasers when everyone is buying shares in the names at the top of the relative strength lists. But those are "special case" markets; exceptions to the rule; outliers.

Here is the key to this problem: price momentum that is not sustained by underlying financial strength in the company itself is a target for short sellers. This makes weak stocks that are overbought on price momentum very vulnerable to collapse. To put this differently: any momentum strategy that relies on price movement alone is doomed to eventual failure. When it comes to momentum stocks, *price momentum alone is not enough!* You'll see what I mean shortly.

I define momentum stocks differently. A momentum stock in my book is one which not only shows a sustained and increasing trend in price, it also shows strong trends in certain key fundamental indicators. For price momentum to continue, even in the near-term, there needs to be value in the underlying company, either real or perceived. Otherwise the uptrend becomes vulnerable to short sellers and profit takers. Thus any trading system that aims to profit consistently and sustainably from momentum stocks needs to go beyond price movement alone. It needs to be a scan built on both technical and fundamental parameters.

In this Trading Manual, I am going to share with you the results of my 5-year study of momentum stocks. I will outline the key essentials that need to go into any scan you build as you search for the best momentum trades. We will see together what does and does not work. On the basis of this study, we will then detail several very specific rules that will help you build your own momentum stock scans.

Please note that this Trading Manual serves as an introduction to our new weekly stock advisory service, "The HOT STOXX LETTER," available by subscription only at DrStoxxTrading.com. At the same site, you will also find our companion service, "The PENNY STOXX LETTER" which has an even more robust performance history, though it is also more turbulent (as expected with penny stocks). We offer a substantial discount if you purchase both letters together.

The HOT STOXX LETTER recommends the 3 best momentum stock picks each week. These recommendations come from a set of scans that I built and tested, and which I currently use for my own trading. Because The HOT STOXX LETTER is only available by paid subscription, and because I use these strategies to find stocks for the family fund I manage, I cannot fully disclose the exact parameters of the scans I use. But you will be able to take what is taught here and build for yourself a very robust system scan that highlights the best available momentum setups.

PART ONE: RESOURCES

There are several resources you will need to build the scans as suggested in this Trading Manual. Each of these tools charges a fee. If you approach your trading as a business, like I do, you can count these costs as part of your necessary expenditures. When it comes to trading, a little investment in the right tools will go a long way toward building your profit potential and earning power.

Research Tools

Before we look at scan-building tools, I'd like first to give you some recommended reading. Whenever I am building a new system, I like to do background research into the individual concepts that go into the system's parameters. This way I have greater confidence that what I am doing is built on methods and strategies that have been tested and proved profitable by much smarter minds than mine!

To this end, I can recommend two great books published on subjects that lie at the heart of the momentum system I will be teaching you in this Manual. It is not necessary to have this background knowledge, but as someone who served in higher education for over twenty years, I value this kind of knowledge. I also know as a trading coach that understanding why a system works can really boost one's trading confidence.

I thus strongly recommend the following two books:

William O'Neil, *How to Make Money in Stocks* (McGraw-Hill, various). This is a classic and comes in several editions and versions. The one I like best is the 2010 edition which is subtitled, "Complete Investing System". While O'Neil's famed "CAN-SLIM" system is different from what we teach here, his basic concept of buying growth stocks that are also outperforming the general market is right at the heart of the momentum concepts I teach in this Manual.

Mitch Zacks, *Ahead of the Market* (Martino Fine Books, 2011). Mitch Zacks is the son of Dr. Len Zacks, an MIT Ph.D. in mathematics whose doctoral research uncovered one of the most powerful fundamental drivers of price momentum: the changes in the consensus of analysts' expectations regarding a company's future earnings prospects. Zacks Investment Research, an advisory firm whose work I rely on daily, is built upon this key insight. *Ahead of the Market* is an excellent primer on the concept. We will be incorporating several variants of this concept into our momentum scans.

Scanning Tools

The momentum scans we will be building in this Trading Manual incorporate both fundamental and technical parameters. There are very few scanning services available today that are able to incorporate both types of parameters. Most stock scanning tools offer either fundamental filters alone, or technical filters alone. What we need is one that offers both. There are some work-arounds that can be used to compensate, but the most robust scans can only be built with software that offers both fundamental and technical parameters.

The three scanning services I can recommend are these:

FINVIZ.com
FINANCIAL VISUALIZATIONS

www.finviz.com

Finviz.com – This is an excellent service that every trader should be familiar with. It is free if you don't mind delayed data. Otherwise, you can pay the minimal monthly charge, like I do, for real-time data and scanning, and advanced technical charting.

The advantages of Finviz over the other two services are its low cost, and its very user-friendly scanning tool. You can also build watch lists of stocks directly from your scans with just a couple clicks of the mouse. But the site has two nearly fatal flaws: it lacks one of the fundamental filters we use to build our most robust momentum scans, and it has no backtesting feature. Without the backtesting feature, you will never really be sure that what you are building is profitable. But if you are new to systems-building, or are trading on a limited budget, it is a great tool to use.

http://woas.zacks.com/zcom/researchwizard/

Research Wizard – Research Wizard is a downloaded software that is sold through Zacks Investment Research. It accesses nightly "end of day" data to give you fresh lists of stocks for the next trading day. This user-friendly tool has all the parameters we need to build robust, profitable momentum scans. For those who like to tinker with parameters, the Research Wizard offers the ability to custom create scan filters. Moreover, it has an excellent backtesting tool that can test your system on over 17 years of data, including the ability to test hard stops, trailing stops, short-only strategies, and multiple strategy comparisons. This is the tool that I used to build my most profitable momentum systems. All the performance data listed in this Manual were created using Research Wizard. Research Wizard is the tool I use to find trades for our new service, "The HOT STOXX LETTER".

There is a catch, however. While the RW is the best tool I am aware of for what we are doing here, it is also the most expensive. The normal cost for a year's use of the Research Wizard is $1800, and that is with limited backtesting data. If you want the full package, you will be paying $3,000 per year. For some, $150 to $250 per month is a deal-breaker. I certainly understand that. For the first few years of my trading career, I traded on a tight budget. I tried to keep my overhead costs low so that I could pump as much as I could of my profits back into my account. But here is some good news: you can get a substantial discount if you follow these steps: call customer service at Zacks and ask for David Bright (or whoever is in charge of product sales), and let him know that I (Dr. Tom Carr, aka "DrStoxx") recommended the Research Wizard to you. Then ask for "the lowest price you are willing to offer". If you are assertive and counter-offer, you should be able to work out a price that both you and Zacks can live with. Alternatively, Zacks does offer "lifetime" access at a one-time payment – currently it is $5000 -- which would save substantially in the long-run. I've been using Research Wizard for 10 years now and consider it an indispensable tool.

STOCK INVESTOR PRO

http://www.aaii.com/stock-investor-pro

Stock Investor Pro – I consider this product a viable middle way between the cheap but inadequate Finviz and the expensive but fully equipped Research Wizard. I myself use it as a back-up tool to Research Wizard. I also rely on it exclusively for a number of the trading systems I describe in my third book, *Market-Neutral Trading* (McGraw-Hill, 2014).

Stock Investor Pro is a downloaded software that runs on data provided by the American Association of Individual Investors (www.aaii.com) which supports the software and provides customer service. Stock Investor Pro has all the parameters we need, both fundamental and technical, to build robust momentum scans. While less user-friendly than the previous two products, there is a set of online video tutorials you can view to get acquainted with its functions. And the price is certainly on the mark. An annual subscription only costs $298, but it is nearly always on sale for $198. A two-year subscription lists at $598, but that too is usually on sale at only $299. At these prices, Stock Investor Pro is certainly a great value.

There are two drawbacks to Stock Investor Pro. First, it only works on weekly data, uploaded to the site each weekend. You are automatically prompted to download the data at each use if you are not using the most current upload. These downloads can take several minutes, depending on the speed of your internet connection. The second drawback to the product is that it has no backtesting functionality.

With that I mind, I strongly suggest doing the following, especially if you want to build your own momentum scans: first, haggle with Zacks for the cheapest annual fee you can get for the Research Wizard. Use the Wizard for a year, building and testing your systems per the guidelines I set out below until you get a super set of very robust momentum scans. Then cancel the Wizard, subscribe to Stock Investor Pro, and in that software build your super set of scans. The whole process, not allowing for tax deductions, might put you back about $2000 for the year, but that is a small price to pay for being able to find and trade some of the most opportune setups in the market on a week to week basis.

On the other hand, let’s hope that you make so much money trading your momentum stocks that you are able to afford both Research Wizard and Stock Investor Pro!

PART TWO: DEFINITIONS

All stocks are typically divided into types, depending on the fundamentals of the underlying company and how their share prices are expected to behave in certain types of markets. While the following list is not exhaustive, some of the more common stock types are these:

1. ***GROWTH STOCKS***. A growth stock is one that represents a company known for its rapid growth of earnings per share (EPS), revenue and sales per share, from quarter to quarter and year to year. Growth stocks normally carry higher P/E values, or no P/E value at all if their earnings are in the red, because their present value lies not in what they are earning now, but what they are expected to earn in the future. Growth stocks tend to outperform the markets when they are rising, and tend to underperform when the markets are falling.

2. ***VALUE STOCKS***. A value stock is one that represents a company known for its strong net income per share, strong sales per share, low price to book value, and strong free cash flow. Value stocks often disperse dividends and carry low P/E values, along with low P/Sales and P/Cash Flow values. Generally speaking, value stocks are desirable not so much for their future earnings potential as much as for their past earnings record relative to their current share price. Value stocks tend to fall out of favor during strong bull markets, and come back into favor during weak and more volatile markets.

3. ***MOMENTUM STOCKS***. A momentum stock is traditionally defined on the sole basis of movement in its share price. A momentum stock is one in which the price per share shows sudden and then sustained acceleration in the prevailing price trend, whether up or down. But this change in price movement is normally a product of change in either the company's underlying fundamentals (e.g., an expected rise or fall in earnings), or in the perception of the company due to some extrinsic change (e.g., a cultural shift which suddenly makes the company's product "hot"). Momentum stocks are easily recognized by their price charts which typically display short term bursts of movement out of an area of price consolidation, along with a sustained trend in that same direction. Momentum stocks are expected to continue in the same direction over the near-term, regardless of market direction.

Most traders and investors focus on one of these three categories. Warren Buffett, for example, arguably the greatest investor of all time, is a "value stock" guru. His mentor, Benjamin Graham, was also a "value stock" guru. Both men built tremendous records of long-term success. Others have turned to "growth stocks" to build their fortunes. Martin Zweig and Louis Navellier are both examples of successful fund managers who focus primarily on strong growth stocks. Those who chase "momentum stocks" are also ranked among the winners of Wall Street. They include fund manager, Richard Driehaus – the "founding father" of momentum investing – who currently oversees a $10B fund; and the infamous Jesse Livermore, considered by a recent biographer to be "the greatest trader who ever lived," and whose personal fortune at one time peaked to nearly $14B in today's money. On his own trading style, Livermore said this in his autobiography, *Reminiscences of a Stock Operator*:

"When some of my stock trading operations are given, you will notice I made my first trade…when the force of movement was so strong that it simply had to carry through."

Livermore's statement captures, in essence, the gist of momentum trading: enter on strong price movement with the expectation that that movement will continue in the same direction over the near term. Sounds reasonable doesn't it? Unfortunately, as a stand-alone filter for finding great trading stocks, trading on strong price movement alone does NOT work well. My research demonstrates that simply chasing price momentum is not enough to build a winning trading system. My research also shows that by combining all three of our stock types together, truly amazing trading systems can be created!

It is to that research that we now turn.

PART THREE: PRICE MOMENTUM ALONE IS NOT ENOUGH

I have spent over five years researching momentum stocks. I describe this process in chapter 2 of *Market-Neutral Trading*. My quest initially was to find the common technical pre-set to the 500 most explosive price movements seen in individual stocks over the recent past. My working assumption was that there was a quantifiable footprint in the technical charts of stocks just prior to their price explosion. If I could isolate this footprint, then code it into a technical scan, I figured that I would have the best trading system on the planet!

In fact, my work did indeed uncover a very common pattern in nearly half of the stocks that rose sharply in price. Unfortunately, I did not learn of the fatal flaw in my logic until I traded the system with real money. After it failed miserably, it became painfully apparent that just because there is a common pattern that precedes most strong rises in price, it does not follow that every stock displaying this pattern will rise in price. In fact, most don't. They either go sideways, or down, or down sharply.

This same fatal logic is at work in most momentum trading systems. The reasoned assumption in most of these systems is that stocks showing the strongest short-term gains are preceded by strong acceleration in share price. This seems reasonable because most stocks that go up sharply in price began their ascent with marked acceleration in price. Unfortunately, this reverseengineered thesis is inextricably paired with a forward-looking truth: most stocks that show strong price acceleration shortly thereafter experience strong pullbacks in price. Thus a short-term trading system based on near-term accelerations in price movement alone is doomed to dismal failure.

To prove this point, consider the following data. Imagine that we built a simple momentum trading system based on price momentum alone. This simple momentum system could be coded into a scan that is based purely on percentage price change over three different time frames. It might look something like this:

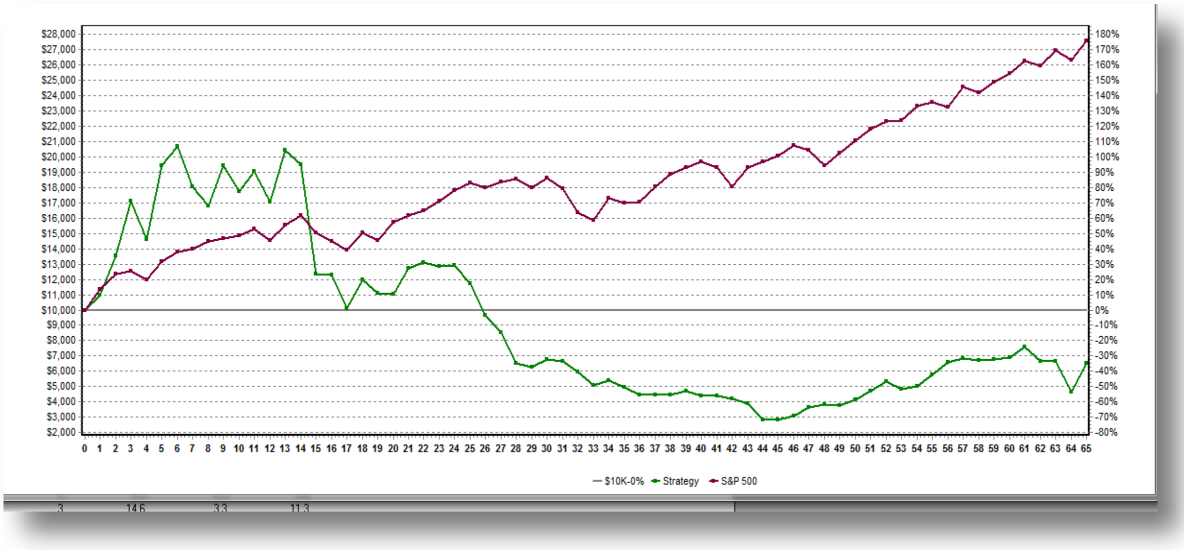
- **Price > $10 per share**
- **Average Volume > 100,000**
- **24-week % Price Increase = Top # 30 stocks**
- **12-week % Price Increase = Top # 10 stocks**
- **4-week % Price Increase = Top # 3 stocks**

This scan teases out from the universe of over 8000 stocks the 3 that rise to the top of the list based exclusively on upward price momentum. As momentum trading systems go, this is exactly what you want: stocks that are moving up strong in price over middle-range and near-term time frames. Now, let's backtest this system over the past 5 years, using a 4-week rebalancing period and see what happens. After all, this is where the rubber meets the road. If the system cannot turn a profit over the past, it very likely will not do well in the future.

To give my system every possible advantage to show its strength, I selected the 5 years that began at the bottom of the recent market crash (March, 2009) to the all-time market highs that were printed in the S&P 500 in March, 2014. This was an especially bullish period for US stocks as they rallied off the deep-cut lows caused by "The Great Recession" of 2007 – 2008. The S&P 500 rose 165% during this period for a compounded annual growth rate of over 22%. How did our "momentum stocks fare? Not very well. In fact, they actually lost money!

Let me say that again: during what for many younger investors is the greatest bull market they have ever seen, our simple momentum stock system LOST MONEY!

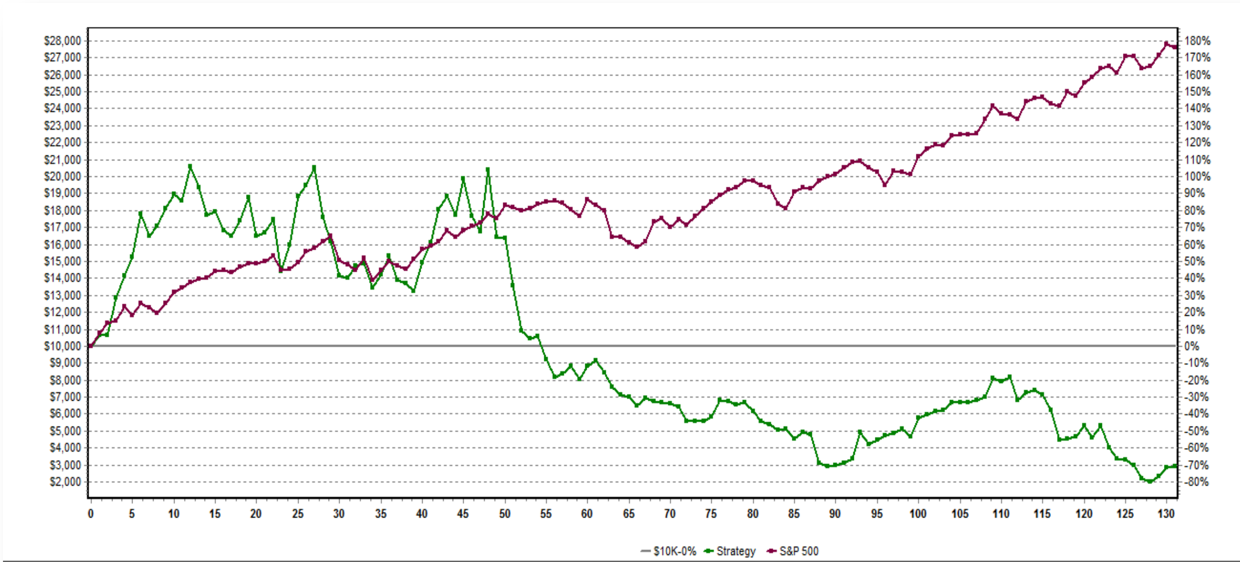
The following graphic shows the returns for the above screen when using a 4-week rebalance interval: a loss of -34% over 5 years vs. more than +170% gain for the S&P500! Ooops!



5 year test of Price-only Momentum Screen (Longs, 4wk rebalance)

This clearly demonstrates just how "weak" momentum stocks (represented by the green line) can be, even in a strongly bullish market, when price momentum is the only criterion used to filter stocks

Normally a robust scan will improve its returns by shifting to a shorter rebalance period. In the returns shown above, we were using a 4-week rebalance period. This means that the scan was run every 4 weeks, with any stock not showing up in the scan sold and replaced with a new stock from the scan. Perhaps by tightening the period to 2 weeks, we can improve the returns. But watch what happens now to our price-only momentum scan:



5 year test of Price-only Momentum Screen (Longs, 2wk rebalance)

Instead of improving our returns, which is what we expect from a robust scan when we tighten the rebalance period, we made them worse! We went from a loss of over -34% to a loss of -71.2%! And what was worse, we saw our system max drawdown for the period rise to -91%, which compares very unfavorably to the S&P500, which had a max drawdown over the same five years of only around -15%. So clearly, scanning for price momentum alone is NOT the way to go!

And yet, it is an established piece of trading wisdom that buying stocks showing strong price momentum – what some call "trend following" or "trend trading" – is a profitable endeavor. What are we missing? To answer that, we need to do some more research.

PART FOUR: ADDING FILTERS

We can conclude from the foregoing that chasing after price momentum alone is a recipe for disaster. Yes, the "turtle traders" and other species of "trend followers" normally use systems based on price momentum alone. But the Turtles were trading futures, not stocks. Stocks are a very different game; they abide by different rules. If anyone tells you he is making money trading momentum stocks based on price alone, he is either lying, very lucky, or will soon suffer a nervous breakdown because he's glued to the monitor scalping out of every minor price twinge.

Yes, some can make a good living trading in and out of intraday momentum swings. But we are not talking about day-trading in this Manual. And you can have incredibly profitable streaks putting on very short-term trades in the big "momo" names when they are on the move, and the overall market is moving in your favor. But this trading method is never more than about a month away from going bust on a string of big losses.

What we are after here is a momentum trading system supported by a set of functional scans that can sustain steady, long-term gains over a profitable "trade for a living" kind of career. We also want to see this system minimize losses and even post decent gains during weak market periods. To get there, we will need to learn how to trade momentum stocks profitably, because it is the best game in town. But to trade momentum stocks profitably, we will need to learn the key to turning a losing system (trading momentum stocks based on price movement alone) into a winning system.

Here is the key**:** our scans need to account for the reality that price momentum will only be sustained by the trading community (both professional and retail), even over the near-term, when there is real value in the underlying company. Real value can come in various forms, but my research has narrowed that range considerably. As we will see in the next part of the Manual, once we add filters to our scan that factor in fundamental value – i.e. value in terms of the company's sales, earnings, growth and valuation -- we will see our profits skyrocket.

Adding a Valuation Filter

Our aim now is to find filters for our scan that help us identify the real quality stocks among all those stocks that show momentum in price, i.e. the stocks that despite an upward rise in price still trade at reasonable valuations based on earnings and sales. So what then happens if we add a valuation filter to our scan? There are several different types of valuation filters we could use, the most common of which is the P/E ratio (Price to Earnings). But since many of the best momentum stocks do not (yet) show real net earnings, and thus have no actual P/E ratio, this is not a good choice.

Another valuation metric that is commonly used by value stock investors is the Price to Book Value (P/BV) ratio. I discuss this ratio in greater detail in Chapter 7 of *Market-Neutral Trading*. There I describe the work of the main proponent of this ratio, Dr. Joseph Piotroski, an economist at the University of Chicago. Piotroski has statistically demonstrated that low P/BV stocks tend to outperform high P/BV stocks over time, and that they really outperform once other fundamental parameters are considered. But the problem with using P/BV as a valuation metric is that the vast majority of low P/BV stocks show very little price momentum. This is why they have such low P/BV values: their share price has fallen significantly. In fact, most companies on their way to bankruptcy will spend some time in the low P/BV universe of stocks.

Rather what we need for our momentum scan is a valuation ratio that incorporates real growth in the company's perceived value. The PEG ratio works well for this (P/E divided by EPS Growth Rate) but since, again, many strong momentum stocks don't have a P/E, they don't have a PEG either. So we need to look elsewhere.

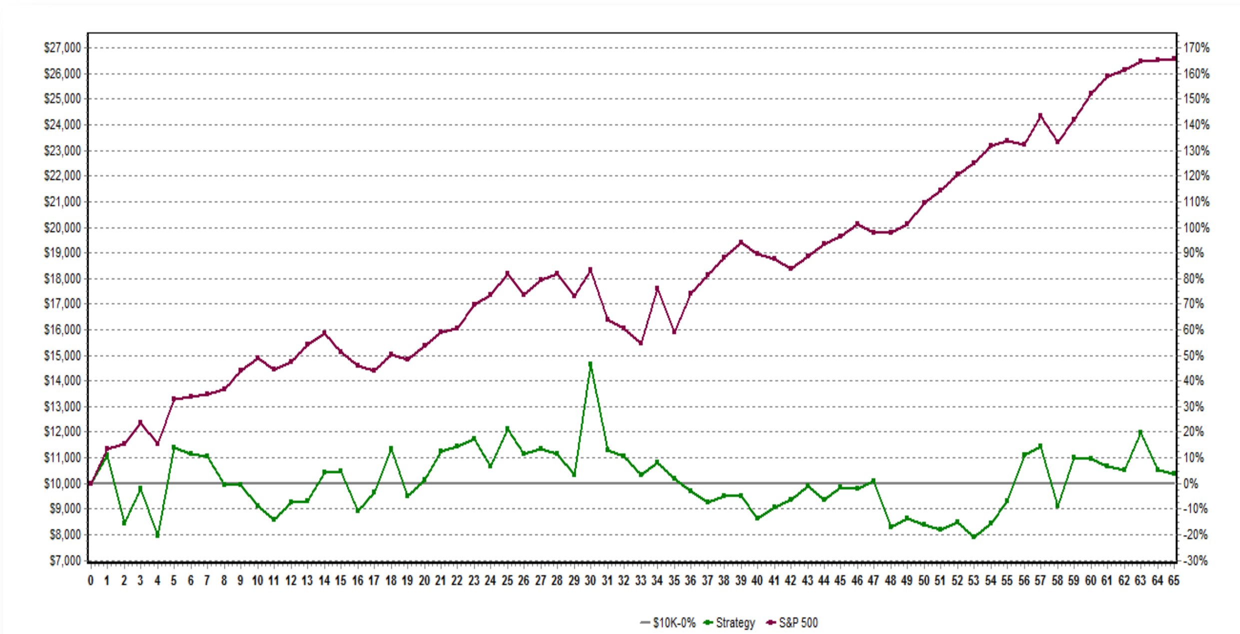
The valuation metric that suits our purposes perfectly is the Price to Sales ratio (P/S). This ratio is low when a company has a high level of sales revenue number of outstanding shares relative to its price per share. This single metric can be used to highlight companies that have real momentum in their earnings power because they are growing their sales revenues (even if they have no net income yet), *and* are trading with relatively smaller share floats (hence are more responsive to changes in share demand), *and* are not yet overly priced relative to those revenues per share. It is this universe of stocks that tend to be the real winners in the momentum game.

For our purposes here, a low P/S metric is anything under 1.0. If you are trading large cap momentum stocks, you can lower this even further to, say, 0.7. A P/S ratio of 1.0 means that the company is selling $1 of its product per outstanding share for every $1 in its share price. Another way of thinking about the P/S ratio is that, if a company is trading at only 0.5x sales revenue, then you are only paying $0.50 for every $1.00 of sales. That's a great value! That's the kind of stock that tends to carry momentum higher because there is so much perceived value in the shares at current prices.

So let's see what happens when we add a P/S valuation filter to our scan. Now, with this valuation requirement added, we end up with a momentum scan that looks like this:

- **Price > $10 per share**
- **Average Volume > 100,000**
- **Price to Sales Ratio < 1.0**
- **24-week % Price Increase = Top # 30 stocks**
- **12-week % Price Increase = Top # 10 stocks**
- **4-week % Price Increase = Top # 3 stocks**

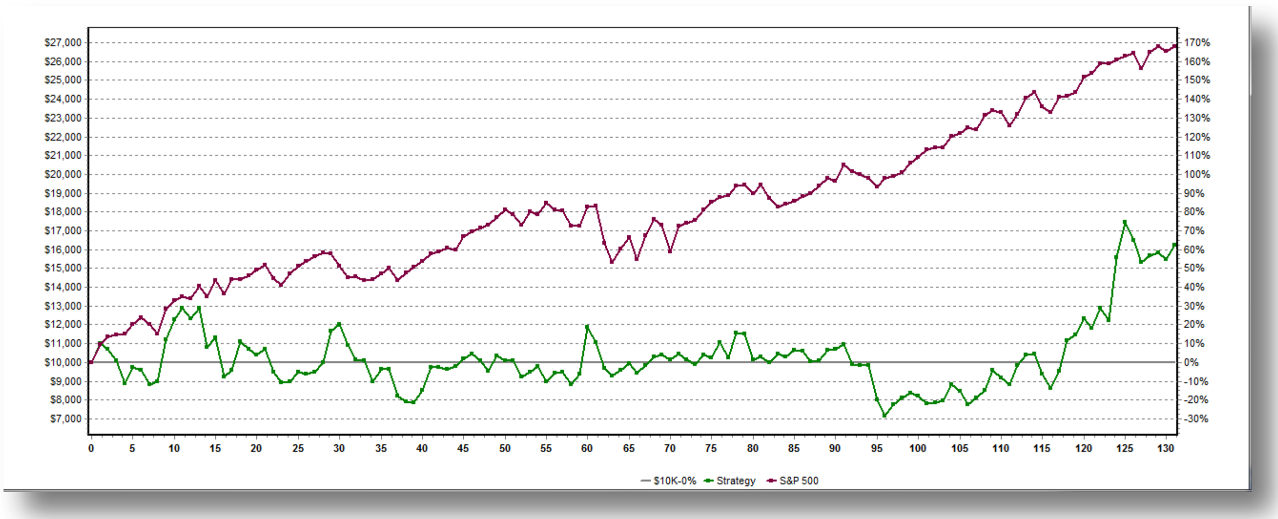
Just watch now what happens when we run this scan over the same 5-year period we used above, using the same 4-week rebalance period:



5 year test of Price + P/S Momentum Screen (Longs, 4wk rebalance)

Eureka! We just turned our losing scan into a money-maker! Okay, a 3.7% gain over 5 years of a strong bull market is nothing to get excited about. But it shows us that we are on the right track. By requiring that our passing companies show strong sales growth relative to their share price, we have successfully weeded out, on average, all the losing momentum stocks.

Now, if our scan is a robust one, we should see even more improvement when we move from a 4-week rebalance period to a 2-week period. And this is exactly what we see:



5 year test of Price + P/S Momentum Screen (Longs, 4wk rebalance)

Not only have our returns improved from a -70% loss to a 62.6% gain (both with weekly rebalancing), but we have also reduced the max drawdown for the scan to a more manageable -44%! This scan still underperforms compared to the S&P 500, so we have some work to do yet, but it is a huge step in the right direction.

Adding a Fundamental Growth Metric, Part I

We can improve our scan even further by adding a fundamental filter that aims at a very particular form of momentum: anticipated earnings growth over the next quarter that is stronger than what had been expected from the company. We can thank the aforementioned Dr. Len Zacks for this gem of an addition. He wrote his PhD. Thesis on MIT on the topic. It was Dr. Zacks' amazing discovery, to our great gain, that the most powerful predictor of future price gain is the "earnings estimate revision". Specifically, whenever an analyst or the company itself comes out and says, "hey, we got it wrong. Looks like our earnings are better than we thought…so we are going to revise our estimates by raising them."

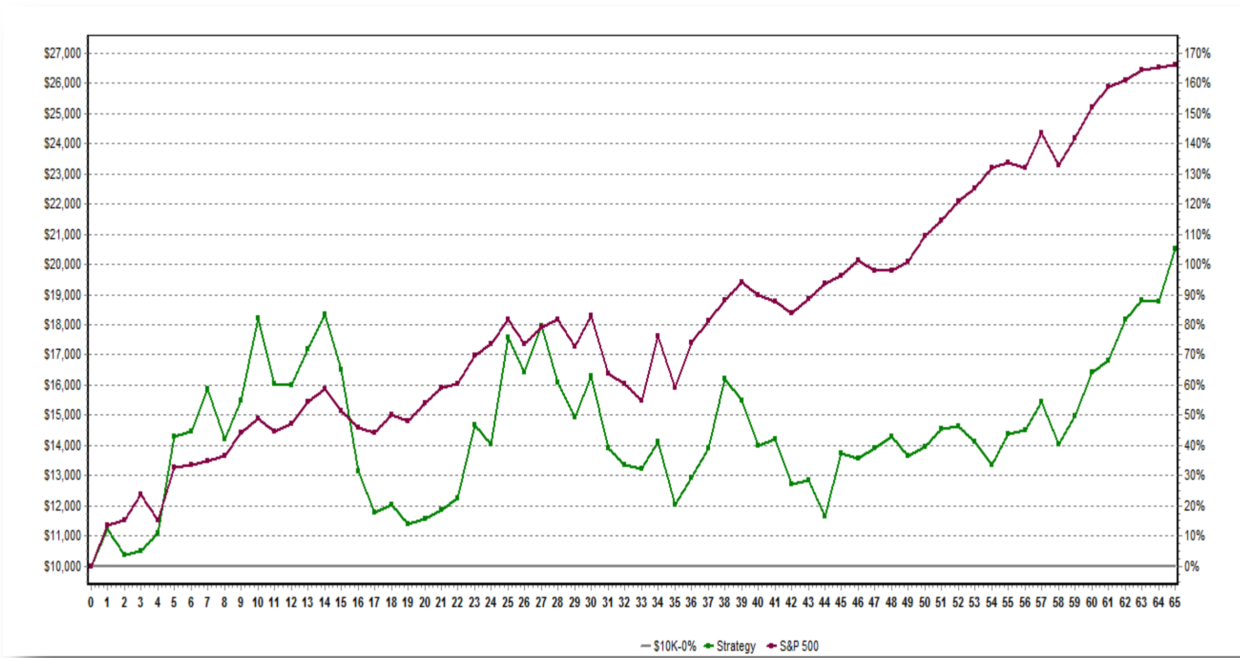
So what we need to do in order to add this most reliable of fundamental growth metrics to our momentum scan is to scan for companies that have, in recent weeks, raised their earnings guidance for the next quarter. It turns out that this is more easily said than done. It's not like there is a site where all earnings estimates revisions are put on public display. But there are ways of adding this filter to our momentum scan so that the scan itself weeds out only those stocks that have made such a revision in the recent past.

Let's look at this in greater detail. Most companies issue forward-looking guidance for the next quarter and fiscal year when they make public the results of the previous quarter's earnings. Some larger companies, and companies in certain industries like retail, also give mid-quarter updates. When companies make these forward-looking projections, they usually give a range of possible EPS values they anticipate falling within by the time the next quarter's announcement is made. By comparison to what the company said at the previous update, this range can be measured as either above, below or in-line with previous statements. Normally, projections made above the previous range are well received by the market over the near-term, hence their predictive power.

What we are looking for in this filter is at least a 5% increase – the minimum amount needed to make the revision materially relevant – in the projected range of Q/Q EPS. As Dr. Zacks demonstrated, this revision is incredibly predictive of near-term future price movement. I've written at length about this particular metric in Chapter 8 of *Market-Neutral Trading*. I've built several trading systems around this filter and when coupled with sound technical analysis, it works incredibly well. With this filter added, our momentum system scan now looks like this:

- **Price > $10 per share**
- **Average Volume > 100,000**
- **Price to Sales Ratio < 1.0**
- **Q(1)/Q(0) EPS Estimate Revision in past 4 wks > 5%**
- **24-week % Price Increase = Top # 30 stocks**
- **12-week % Price Increase = Top # 10 stocks**
- **4-week % Price Increase = Top # 3 stocks**

The following chart shows what happens to our returns with this fundamental filter added:

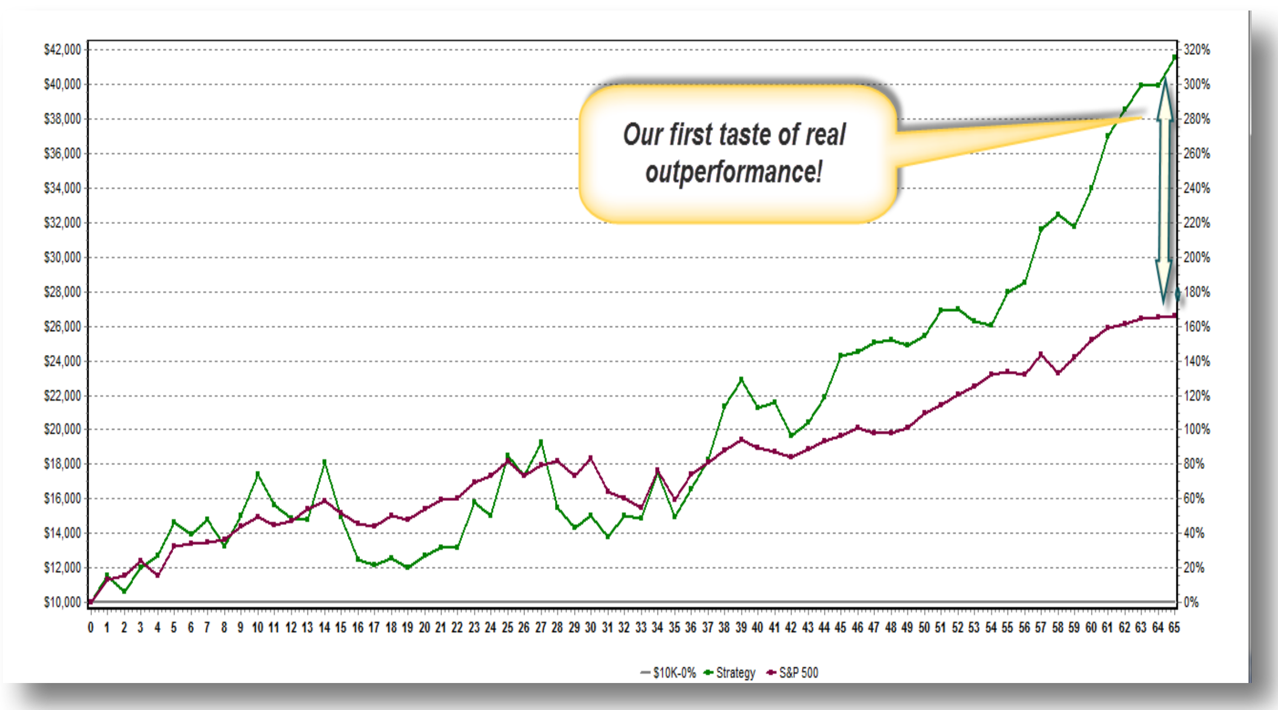


5 year test of Price + P/S + EPS 5% Revision (Longs, 4wk rebalance)

Here with the simple addition of one line to our scan, we've added almost 50% of return on investment over the 5 year look-back period. Not only that, but we've also cut our max drawdown to -37.7%, a significant improvement. Still, our momentum is not where we would want it to be. It's improving, but we are still lagging the S&P 500. There is more work to be done.

But wait, it gets even better. If a 5% EPS revision could make such an improvement, what would a 10% EPS revision filter do to the returns? Think about that for a moment. To revise a company's quarterly earnings up 10% from previous estimates is saying a lot. It's either saying that "our former accounting figures were way off because we are stupid!"…or more likely it's saying that, "we are having an incredible quarter, much better than expected, with our product flying off the shelves, and our overhead costs lower than we projected, and with all those new contracts we didn't see coming our way."

In any case, a 10% jump in a bullish direction is significant, but will it change our trading outcome? Let's put that into our scan and see:



5 year test of Price + P/S + EPS 10% Revision (Longs, 4wk rebalance)

Okay, now we are talking! With our valuation filter on board (P/S < 1.0) marking relative strength in sales, and with our EPS growth momentum filter requiring our passing companies to be surprising the markets to the upside at least 10% with their earnings potential, and all of that taking place before we even begin to look at price momentum, we now have a momentum scan that outperforms the S&P 500. Yeah! That's the goal of any trading system, to produce "alpha." The 318% 5-year return is nearly twice the return of the S&P. That's a lot of alpha right there. And it gets better, for we have also reduced our max drawdown to -33.8%.

But we can still do better. Watch now what happens when we require that our undervalued companies raising earnings estimates are also showing significant growth in earnings over the past quarter. This is where things get really exciting!

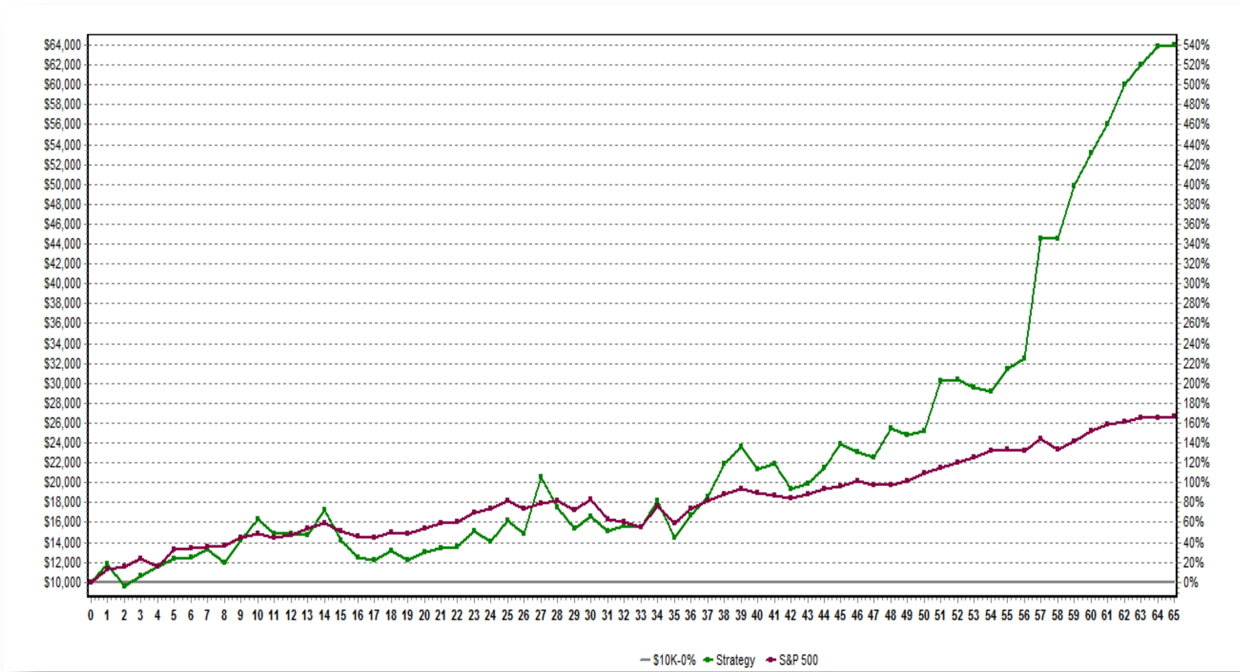
Adding a Fundamental Growth Metric, Part II

We have measured sales strength relative to price. We have measured significant improvement in forward anticipated earnings growth. What we need to add now – and this is our final add – is the requirement that companies demonstrate actual EPS growth over the past quarter. It is the most recent quarter that will drive share price over the near term. We already have in place the requirement that companies create the anticipation of a great quarter going forward. Now we need to bolster that anticipation with the proven ability of the company to produce real EPS growth. Remember, many of the companies that make it through our scan do not have actual earnings. But growth doesn't need actual earnings to be measured. A reduction in earnings loss also counts as growth. So this is why we can measure EPS (earnings per share) growth in companies with no net earnings. A reduced loss can also be a form of EPS growth.

What we are looking for here with this filter is a % change in actual EPS (actual EPS meaning EPS from the past rather than a future projection) on a quarter to quarter basis greater than 5%. We can raise that number, but doing so typically reduces our pool of possible companies to too few, so we will keep it at 5%. With this last filter in place, our momentum system scan now looks like this:

- **Price > $10 per share**
- **Average Volume > 100,000**
- **Price to Sales Ratio < 1.0**
- **% Change Q/Q EPS Estimate > 10%**
- **% Change Actual EPS Q/Q > 5%**
- **24-week % Price Increase = Top # 30 stocks**
- **12-week % Price Increase = Top # 10 stocks**
- **4-week % Price Increase = Top # 3 stocks**

Using the same 5-year look-back period and a 4-week rebalance period, our returns now look very strong:



5 year test of Price + P/S + EPS Revision + EPS Actual (Longs, 4wk rebalance)

From this chart we see that our returns now have propelled up to 540%, a full 3.25 times that of the S&P 500, and a +220% improvement over our previous scan. Moreover, our max drawdown is now down to a much more reasonable risk-level (considering the potential reward) of -29.6%. And we would see those returns increase again by drilling down to a weekly rebalance period.

As good as this return is, it is nowhere near the +30,000% return I was able to attain with my momentum scan over the same 5-year look-back period. This is the "secret sauce" that lies behind the success of THE HOT STOXX LETTER (www.drstoxxtrading.com) and it is a formula I teach in my work with private coaching clients. I can't therefore give it away here. But in the scan we have built in this manual, you have all the principles you need to begin building hugely profitable momentum stock scans on your own.

Remember the two crucial keys to profiting from trading momentum stocks are as follows:

1. *Trading momentum stocks based on price momentum alone loses money!*
2. *Trading momentum stocks profitably over the long-term requires finding momentum stocks that also have strong underlying value in the sales and earnings of the company.*

Clearly there is a great deal of room for improvement on the scan we have built here. But it is a great base to work from. That is the fun of systems building: you change this a little here, move that around there, and see what happens to the returns. It's kind of like fishing: you throw out the bait you think will work best, in the spot you think the fish are, but you never really know what you are going catch (if anything at all!).

A Few Words about Position Management

Before we turn to the last part of the Manual, I should add that no system scan is ever as good as the position management methods you use once you are in the trade. Those who trade any momentum system need to be aware of the risks involved. There is no high-reward trading system that does not take on outsized risk. It is how the game is played. Some traders will want to use stop-losses to manage their risk. My research shows that stop-losses will reduce your max drawdown, but they also reduce your overall performance. If you can stomach the risk, the best reward will come with holding on to all positions until the next rebalance period, no matter what happens.

For this reason, it is best to begin trading your momentum scan trades using a very small amount of money. You are only buying 3 stocks per week, so it is perfectly reasonable to begin with as little as $3,000, with $1,000 going into each of your initial positions. This way, even a 50% drawdown (-$1,500) is not likely to bring you to bankruptcy, and if it did you should not be trading.

The best way to figure out how much you should start with is to ask yourself, how much money can I afford to lose without in any way interfering with my ability to pay bills, pay my debts, give generously, support my family, etc. Then double that amount and that is your starting point. This gives you a 50% cut off point. If at any time you are down 50%, you stop trading and close the account, and you wait until you are better suited financially. With this trading system, a 50% drawdown is not likely (its 17-year average maximum drawdown is only -27%), but it can hit that and more during a market crash. So it is prudent to keep that 50% cutoff number in mind as you begin trading. Know the point at which you will call it quits if things go south.

In nearly every backtest I ran in the Research Wizard, the best returns were gained by simply letting the system itself take you out of the trade. With this method, at each rebalance period – whether 4 weeks, 2 weeks, or 1 week – you simply hold the stocks that continue to show up in the list of passing candidates, and you sell those that don't. Those that are sold are replaced with new stocks on the list. This "rebalancing" can be done prior to the open on Monday morning by using "OPG" or "market on open" orders to buy and sell.

Letting the system itself stop you out of a trade makes all kinds of sense. These days, high frequency traders and market makers can push stock prices around quite easily by simply pumping up the volume over a period of market inefficiency. In this way they can run the price through your stop-loss, then having taken away your shares at a low price, ram the stock price back up again before selling your shares to someone else at a higher price. This is why we are seeing an increase in intraday price movements and day to day volume levels.

To avoid this mischief, we can let the system tell us when to exit our trades instead of a stop loss. With our momentum system as outlined above, when a stock falls off the list it typically means that either the stock has rallied above reasonable valuation levels, or it has not kept up in price momentum and thus has dropped out of the top 3 stocks. In either case, it makes sense to sell that stock and replace it with a better one, namely, one from the top 3 list as determined by the system scan. Yes, trading this way will mean that you will need to take the inevitable large loss, when a stop-loss would have saved you from that. But over time, you will see far more trades turn out to be profitable at the exit when your stop-loss would have bumped you out of the shares for a loss.

The other thing to mention regarding position management is the systematic compounding of your gains over time. I suggest that at each new rebalance, whenever there is a new trade to put on, you calculate what your current portfolio amount is, including both profits and losses from closed trades and from open positions. This is called your “mark-to-mark” amount, and it should be used to determine your position size at each new rebalance period. Simply take that amount, divide by 3, and invest exactly that amount into any new trade(s). In this way you will be increasing your size during bullish runs in the system, and decreasing your size during drawdowns.

PART FIVE: RULES FOR SCAN BUILDING

Okay, I've given you just about everything you need to know to begin building a set of robust momentum scans. I suggest that you start with the final version of the scan we built above. I have no problem with your piggy-backing on my work; but you are best served in the long-run by building and trading your own system scans.

Some of you may be able to work with software that can automate the tweaking process. I'm not that fortunate (nor that technically astute). I do it the old-fashioned way: line by line, tweak by tweak, test by test. For that reason it took me 5 years to build the scan whose +30,000% returns over 5 years you saw earlier in this Manual. Hopefully, with this guide in hand, it won't take you quite as long!

The first thing I need to mention here is that the testing and scan-building work represented in this Manual was all done in the Research Wizard available from Zacks Research. You can replicate these same parameters in Stock Investor Pro, but as I said before, you won't be able to backtest your scans. The best you can do is run the scan on historical data and see how those stocks fared over time (a true labor of love). You will also need to fudge a bit with the three "Top # X" functions in our scan. Stock Investor Pro only allows you to screen for stocks in the "Top X %" of all stocks.

If you use Finviz, you will need to improvise. There is no function for EPS estimate revisions in Finviz, and as for ranking stocks based on 4 week, 12 week and 24 week performance, you will have to do that manually from the lists of stocks that show up after filtering for the fundamental parameters. There are two performance tabs in Finviz, and you can screen for the strong stocks using those (along with your valuation and growth filters). Once you have your list of stocks, you can rank the stocks on the basis of performance over half year, quarterly, monthly and even weekly time periods. In this way you can get pretty close to the same list of stocks that either Research Wizard or Stock Investor Pro turn out. But the main drawback to Finviz is the inability to scan for earnings estimate revisions. You can, however, check the news headlines underneath the stocks that turn up on your scans and look for any report of such revisions. It is tedious, but certainly doable.

With that said, in this final section let me lay out some basic rules for building your own momentum scans. Some of this has already been touched on, but it all bears repeating here.

1. Always start your scans with a price filter (I suggest keep to stocks above $10/share).
2. When building your scan(s), set the fundamental filters before the price momentum filters.
3. Try both lowering and raising the average volume figure if you get too few or too many stocks passing through the scan.
4. The Price/Sales valuation filter should never be greater than 1.0 as a max. Try experimenting with lower values to see if you can improve returns. All studies point to that number as a strong dividing line between strong and weak performance over time.

5. The EPS Q/Q Estimate Revisions filter can be played with. Try raising the value above 10%. Try adding FY/FY along with Q/Q, or even instead of Q/Q.
6. The % change in Actual EPS Q/Q can also be played with. Try raising the value above 5%. Try adding FY/FY along with Q/Q, or even instead of Q/Q.
7. For the 3 lines of relative price strength – short-term, mid-term, long-term – try changing the “Top #” values. Lower numbers will generally improve returns but also increase risk.
8. First make sure your scan is significantly profitable using a 4-week rebalance period. Then lower it to 2-week, then 1-week. The most robust scans should improve at each change.
9. Be sure to run your backtests over different market periods. You’ll want to make sure your scan outperforms in a bear market (e.g., 2000 – 2002 and 2007 – 2009) and in a relatively weak bull market (e.g., 2003 – 2006).
10. Be aware that the Research Wizard backtesting feature counts Friday’s closing price as the official entry/exit price, but new data is not available until Monday morning. Thus there tends to be a lag between backtested results and real-time trading. Sometimes this works in our favor (if stocks gap down Monday morning giving us a better entry than the backtested results), but sometimes it does not.
11. If you prefer a more market-neutral approach, you can build a shorts-only scan as a companion system to our longs-only momentum system. My own testing over the years shows that a shorts-only momentum system can be profitable but also very volatile, so be aware of that and position yourself accordingly. To build a shorts system, try reversing the fundamental

parameters but keeping the price momentum filters in bullish mode. So, for example, you can start with the following scan:

- **Price > $10 per share**
- **Average Volume > 100,000**
- **Price to Sales Ratio > 1.0**
- **% Change Q/Q EPS Estimate < 0%**
- **% Change Actual EPS Q/Q < 0%**
- **24-week % Price Increase = Top # 30 stocks**
- **12-week % Price Increase = Top # 10 stocks**
- **4-week % Price Increase = Top # 3 stocks**

The thesis here is to short "junk" stocks that are in rally mode in the anticipation that reality will kick in and they will fall back to a more appropriate valuation. Remember, just using the very first scan we built above is already a pretty good scan for finding short setups. If you add filters that scan for lousy fundamentals too, you've got, in theory, an awesome shorting system. You will need to play around with the price performance numbers a bit to get a robust scan over different look-back periods. But it is possible to get a shorts-only momentum scan tested over the last 5 year bull market that shows strong triple-digit gains, and double-digit annual returns. And over bear market periods, there is nothing more profitable than shorting "junk-momo" stocks. Keep in mind, however, that in my experience, shorting momentum stocks can be a very rocky ride so it is always best to go in with very small position sizes.

So…that's it. Get to work! Email me directly at info@drstoxxtrading.com if you have any questions.

If "The HOT STOXX LETTER" is open to new subscribers (we cap it at 200 subscribers), consider giving it a try. If not, please consider our even more profitable PENNY STOCK LETTER, or one of our webinars or manuals to help you trade for yourself. I do not take on many coaching clients (maybe 20 per year), but if you are interested in that let me know and I'll send you details. This way you'll be able to see whether the stocks you come up with match what my scans come up with.

And as always, God Bless and Happy Trading!