

Reuters Select Screens

Accelerating EPS Growth

It's good to find companies whose EPS are growing at a healthy pace. It's even better to find companies whose growth rates are accelerating. This screen focuses on firms whose results are growing at an increasingly rapid clip.

Rationale for this screen

Everybody likes to invest in companies whose EPS are growing quickly. But finding good growth situations is often easier said than done. We know that we really want to invest in companies whose EPS show the greatest potential for future growth. But we can't really know what the future will bring. All we can do is estimate the future, usually based on what we saw in the past and what we know of the present.

Suppose we assume companies that have grown briskly in the past will continue to do so in the years ahead. That's a tricky assumption, since we can't be sure that the same factors that caused rapid growth in the past will prove sustainable indefinitely. But even if we are willing to accept the assumption just as a starting point (in order to compile a manageable-sized list of companies whose future prospects that we will then qualitatively assess one-at-a-time), we still have some decisions to make. What past period(s) will we look at? The latest quarter? The latest twelve-month period? The latest three years? The latest five years?

Good arguments can be made for all of these time periods. Looking at growth rates that compare the last reported quarter with the comparable quarter one year ago will produce a list of companies that are growing briskly right now. This is important information for momentum-oriented investors. But such lists will often uncover companies whose latest-quarter rapid growth rates were aberrations.

To learn which companies have proven themselves capable of posting strong growth rates consistently, you may be better off examining a longer period, such as three or five years. But this approach isn't foolproof either. **Factors that led to strong five-year growth rates may not be sustainable over the next five years either.**

Therefore, this screen looks at several periods in order to uncover a pattern of accelerating EPS growth. Companies that make the cut have demonstrated strong growth rates over a period long enough to refute the idea that the good performance was a fluke. The screen also searches for clues regarding the sustainability of the factors that caused strong growth we've seen until now.

Specific Screening Criteria

Here's how the screen was created:

- **Three-year EPS Growth**

We start with a requirement that the EPS must have grown at an average annual rate of at least 15 percent over the past three years. Obviously the hurdle could have been set higher, but business follows a natural cycle in which newer companies grow at extremely rapid rates and then decelerate as they become increasingly established, and eventually, mature. The higher the growth rate over the past three years, the harder it will be for the company to maintain it in the future.

- **Acceleration**

We look for a pattern of acceleration (an increasingly rapid rate of growth) over two separate intervals. We require that rate of growth over the Trailing Twelve Month (TTM) period be greater than the rate for the preceding three years. We also require that the rate in the latest quarter (compared to the equivalent quarter one year ago) be greater than the rate for the TTM.

- **Inferences About The Future**

Screening for future expectations can be challenging. One could simply look at projected growth rates in the same way one looks at rates achieved in the past. But different analysts may base their forecasts on different expectations about the overall economy. Fortunately, there are other approaches. Having already narrowed the list from more than 9,400 companies to less than 200 on most runs, we can now afford to make this part of the screen more behavioral than statistical. Rather than looking at specific growth rate projections, we search for indications that analysts and investors who examined these companies, based not just on numbers but qualitative factors as well, came away from the process feeling encouraged about the future. Two such factors are used here. One is a requirement that the estimate of current year EPS be greater than it was eight weeks ago. The other is that the stock have outperformed its industry average over the past four weeks.

Relative Growth

Growth is a popular investment theme. But how much growth should an investor seek? Should one consider only those companies that are growing 20 percent or more? Or is a 15 percent rate of growth sufficient? Perhaps 25 percent would be a more attractive target.

Rationale for this screen

When screening for growth stocks, it's tempting to seek the highest rate that will produce a list containing a reasonable number of stocks. But that's not always a good idea. Such lists are often tilted toward "hot" industries. That's fine if you want to use a top-down approach to stock selection that focuses primarily on sectors or industries and secondarily on individual companies.

Bottom-up investors look mainly at individual companies and are more willing to invest in firms whose industries aren't in vogue. The idea here is that shares of such companies are likely to fare well over longer periods of time despite the ebb and flow of market fads.

Growth rates can be used to locate companies like this. **Instead of targeting specific growth numbers, seek growth rates that look good measured against some other test(s).** The Accelerating EPS Growth screen seeks companies whose recent growth rates have exceeded the rates tallied over past periods. This screen however, considers acceleration, but also introduces other comparisons. It compares EPS growth to Sales growth, and it looks for growth that exceeds industry averages.

Specific Screening Criteria

Here's how the screen was created:

• Earnings Quality

We start by requiring that the company's tax rate be at or above 25 percent. Unusually low tax rates are often unsustainable over time. One example of this would be a company whose tax rate is being depressed by loss carry-forwards from prior years. When those carry-forwards expire, the tax rate will jump significantly, leading to a lower level of earnings per share, even if the basic business (i.e. its capacity to generate pretax income) continues to grow.

• Sales Growth

A company can boost its EPS by cutting costs, and occasionally by divesting money-losing operations (the latter would cause Sales to fall and EPS to rise). **But such strategies can go just so far.** Over prolonged periods of time, strong rates of EPS growth start with strong rates of Sales growth. This screen requires that each company's Trailing Twelve Month (TTM) Sales growth be greater than the three-year cumulative average rate of Sales growth (the acceleration factor) and greater than the average rate of TTM Sales growth for its industry.

- **EPS vs. Sales**

The screen requires that EPS growth exceed Sales growth over the past three years, and in the TTM period.

- **EPS Growth**

As suggested above, this screen is designed to find companies that may be of interest to long-term investors. But all else being equal, most investors would prefer to take new positions in stocks that seem likely to behave well sooner rather than later. So we analyze EPS by focusing on recent results, these being more likely to influence near-term share price performance. The screen requires that EPS growth in the latest quarter (compared with the equivalent year-earlier period) be greater than the industry average growth rate, and that it be better than the growth rate that prevailed over the TTM period. I'm willing to shorten the time horizon for the EPS analysis in this manner because the previous tests probably eliminated most, if not all, flash-in-the-pan companies.

Relative Momentum

At times, momentum investing gets hot. This screen searches for stocks that have been beating their industry peers by wide margins in terms of price performance and sales growth.

Rationale for this screen

Simply put, momentum investing means buying winners. Different investors have different ways of deciding whether or not a particular stock is a winner. But more important than these distinctions is what's not usually considered: price.

If you're a momentum investor and you found what you believe is a "winner," you buy it. You don't worry about the stock price, its relation to EPS, sales, asset values, growth rates, or any other such metric. You just buy the stock. You might overpay for the shares, but you figure you can always find a "greater fool" later on who'll buy your stock at an even more inflated price.

That's pretty much what momentum investing is all about. From a purely theoretical viewpoint, there's no way to justify this. Indeed, when this "greater fool theory" is described at seminars, the audience tends to chuckle. But for a generation now, greater fools have been laughing all the way to the bank. So if you are going to be a momentum investor, what should you look at?

In the past, stocks were priced in relation to the cash that could be expected to actually reach a shareholder's hands; dividends and proceeds of an anticipated future sale. Later, dividends were de-emphasized in favor of EPS, and then cash flows, as proxies for a company's dividend-paying capability. Now, we've gone a step further, and look to sales as a proxy for a company's eventual ability to generate EPS, cash flows, and then dividends.

Actually, a focus on sales can be quite sensible. For "new economy" companies that lack earnings, sales probably is the only legitimate measure of business performance. It won't always be that way. Eventually, these companies will need to produce profits. But for now, the market is willing to make allowances for the inevitable financial burdens of building new businesses from scratch.

Even those who use sales as a measure must still decide if they are momentum or value investors. A new-era value investor would still refuse to buy a stock if the price is too high in relation to sales per share. On the other hand, a new-era momentum investor may be quite willing to buy if the company is posting excellent rates of sales growth (as opposed to EPS growth).

Assuming you are a momentum investor and that you want to focus on sales growth, you still need to make some of the same kinds of decisions made by those who invested based on EPS growth.

So the question is: how much growth should you expect? As we often do for EPS-based screens, we set the growth hurdle based on comparisons between a company and its industry average.

In some respects, this test is more lenient than would be the case if we simply set a specific

growth target; say 30 percent. By comparing companies to industries, we avoid systematic elimination of companies that happen to operate in mundane business sectors. On the other hand, we also eliminate companies whose strong growth is based on being in a hot industry ("a rising tide lifts all boats").

This momentum-based screen has something of a bottom-up flavor in that we don't simply pick the highest growth rates or share price gains we can find. The industry comparisons shift our attention to companies that are doing better than might be expected simply based on their presence in a particular business.

This tilt toward "good" companies can be worthwhile because of the typically non-existent relationship between momentum investing and financial theory. This lack of connection can be good because you need not be distracted by any theory that tells you a stock can't go higher. The other side of the coin is that financial theory isn't giving you any clues about when the music might stop, resulting in a reversal for the stock.

It's never pleasant for a momentum investor to be caught with a long position when the party ends. But if that happens, the pain will likely be less if, at least, you're holding good companies. That can make it easier to hang on until the momentum tide returns. Perhaps the only thing worse than staring at a paper loss is realizing those losses by selling and then missing the next rally. Few people can truly time market ups and downs as well as they like to imagine.

Specific Screening Criteria

Here's how the screen was created:

- **Relative Sales Growth**
We start by requiring that a company's year-to-year sales growth be more than 50 percent above the industry average in the latest reported quarter, and over the Trailing Twelve Month (TTM) period. It's tempting to add a similar test for a longer span (i.e. three years), but that would systematically eliminate many new-economy companies that haven't been around that long. And for a momentum screen offered at this juncture, that would be an undesirable outcome. We aren't going to be perfect, since some interesting companies are less than 52 weeks old, but we should still try to capture as many companies as we plausibly can.

- **Relative Share Price Performance**
We require that a company's percentage change in share price be greater than zero over the past four weeks and the past 52 weeks. We also require that each company's share price be more than 50 percent above its industry average over the four- and 52-week periods. Reference to a four-week interval is designed to locate stocks that are hot right now. By also looking at the 52-week span, we reduce the likelihood that the current strength is a fluke.

- **PEG (Price/Earnings-to-Growth) Ratio**

The P/E ratio used here is the one we get when we divide the share price by the consensus estimate of EPS in the next fiscal year. The growth rate is the consensus EPS annual rate for the coming three to five years. The screen requires a PEG ratio above 1.00. Value investors want stocks whose PEG ratios are below 1.00. A ratio above 1.00 is indicative of an issue that appeals to momentum investors.

• **EPS Estimate Revisions**

The screen requires that the consensus estimate now in place for the current fiscal year be no lower than it was eight weeks ago. Downward revisions—which is what we're eliminating—tend to dampen momentum-based appeal.

Bear in mind that this screen is tilted toward the aggressive end of the risk/reward scale.

Rising Expectations

There are many things you could look at when evaluating a stock. And chances are that the company scored well on all, or at least a sufficient number, of these considerations if brokerage house analysts are raising estimates to try to catch up to companies that habitually outperform consensus expectations.

Rationale for this screen

Nowadays, companies and analysts communicate very closely and analysts are routinely expected to present earnings-per-share estimates that prove accurate down to the penny. In this climate, any earnings report that tops consensus expectations has the potential to be a market-moving event. (Conversely, unfavorable surprises can put quick and powerful downward pressure on stock prices).

To understand the dynamics underlying earnings surprise and share prices, it's necessary to review the development of corporate "investor relations." Strictly speaking, companies aren't required to have investor relations (i.e. company/analyst communications). Any NYSE, AMEX or NASDAQ company would be well within its rights to do nothing more than file required documents such as the proxy statement, the annual 10-K report, quarterly 10-Q reports, and hold annual (and, where warranted by events, special) shareholder meetings. And a generation ago, many companies, including some that were large and well known, did little more than that. So among the older generation of investors, earnings tallies that fell within 10 to 15 percent of analyst estimates were considered to be within a reasonable range of "estimate error."

As the bull markets of the Eighties and Nineties progressed, institutional investors became more prominent in the equity markets and Wall Street research organizations grew in order to serve this increasingly powerful customer group. As increasingly sophisticated analysts spent more and more time communicating with increasingly talented IR professionals, it became harder and harder for companies to avoid discussing earnings estimates. And as companies participated more closely in the process of creating estimates, analysts became increasingly demanding about the information they desired and confident in the conclusions they drew. Estimates that were once "rounded" to the nearest nickel or dime are now set to the exact penny. Hence an analyst who, twenty years ago, would have been satisfied to estimate quarterly EPS within a 15 percent margin of error now expects to forecast the number to the penny.

In light of the historical development of IR, consider the changed meaning of an earnings report that falls shy of expectations. What might you think if you were the disappointed analyst who expected EPS of \$0.50 only to be confronted with an actual number of \$0.46? Twenty years ago, you might have thought: "I missed by only eight percent. That's pretty good considering the lack of help I received from management." Nowadays, you may think: "I spent an hour with the CEO and CFO, and then two more hours with the IR Vice President. I started out looking for \$0.48, but they kept talking about a \$0.50-\$0.53 consensus range, saying they were comfortable with it. So what went wrong? Do they have a proper handle on their markets? Are their internal controls functioning properly? If they were wrong about this quarter, what does that say about the next period... and the full year estimate... and next year's estimate?"

Consider what this implies. Years ago, when companies didn't do much to guide analysts, earnings surprises meant that the analyst was wrong. But nowadays, earnings surprises have increasingly come to mean that corporate management is wrong. And in the financial markets, few things are as bearish as a belief, among investors, that top management does not have a firm grasp on its own business.

In theory, the same set of reactions should occur when surprises are favorable. If one questions management's grasp of its own business when it reports \$0.46 a share instead of the expected \$0.50, couldn't one be equally concerned if the company reports \$0.54? Reasoning further, shouldn't the stock likewise fall in response to the favorable earnings surprise? But in fact, this doesn't happen. That's because the issue of company error exists along side with a long-standing tendency on the part of Wall Street to "extrapolate" the latest trend; to assume that the most recently reported trend will persist indefinitely.

When corporations report negative earnings surprises, the tendency to extrapolate the weakness into the future aggravates the perception of company error and sparks a sell-off in the stock. When the surprise is favorable, euphoric reaction to the traditional perception that good news will persist indefinitely wins out over concerns about company error. This is not a logical balance. Nevertheless, it is the modern stock market culture.

In fact, one can argue that little of this is truly rational. But for better or worse, these dynamics do move stocks. Accordingly, study of earnings surprises and estimate revisions can be very helpful to investors.

Specific Screening Criteria

Here's how the screen was created:

- **Earnings Surprise**

We begin looking for stocks by choosing companies that reported favorable earnings surprises in the most recent quarter, and in each of the three prior quarters.

- **Supporting Tests**

Data screening contains elements of art as well as science. We can start, for example, with an assumption that positive earnings surprises portend good things for a stock. But suppose an announcement of surprisingly strong corporate earnings is accompanied by a warning that prospects for the next few quarters seem dim. That's likely to hurt the stock. Hence, we must support our basic earnings surprise data with additional tests that aim at investor behavior. In other words, if an earnings surprise in the latest quarter is truly a harbinger of good things to come, there are some things we would expect to see happen within the investment community.

- The current-year consensus estimate must be above where it stood four weeks ago, and the four-week-ago estimate must be above the eight-week-ago estimate. Analysts

wouldn't be raising their estimates if the trend of recent EPS strength is about to end.

- Institutions must be buying more shares than they are selling and this level of net buying must be above where it was a quarter ago. This suggests that portfolio managers also expect the company to continue performing well in the future.
- Over the past four weeks, the stock must have outperformed those of other companies in the same industry. Analysts usually focus on a particular industry and when they turn bullish, they are often doing so based on industry trends. Even so, analysts and money managers tend to have lists of favorite stocks within particular industries. This price performance test is designed to help tune into those lists.

Sales Growth Leaders

Whatever our individual investment philosophies, we all know that ultimately, stock prices are tied to company bottom line performances. And the most fundamental way for a company to generate a healthy bottom line is to flourish on the top line.

Rationale for this screen

Everybody likes to invest in companies whose EPS are growing quickly. But in seeking growth, investors sometimes get so caught up in looking at EPS trends that they don't always dig deeper to see where the strong profits are coming from.

Essentially, there are two ways to generate earnings growth. A company can boost sales. Or, a company can do things that lead to wider margins.

Margins are certainly important, and our Operating Margin screen addresses this theme in great detail. But this isn't necessarily the best way to generate growth over the long term. Companies can cut costs for a while. But they can't do it forever.

Sooner or later, even the best managed companies run out of opportunities to improve margins. Hence long-term growth will depend on a company's ability to generate more sales.

Specific Screening Criteria

Here's how the screen was created:

- **Year-to-year comparisons**

We start with the comparison examined most frequently by investors: the year-to-year comparison in the latest quarter. We look at the latest quarter and require that the Sales change be greater than zero, and that each company's sales growth be greater than its industry average. We then extend the industry comparison to the Trailing Twelve Month (TTM) interval.

- **Longer-term Comparison**

Usually, sales growth is based on healthy demand for the company's goods or services and/or sufficient market power to raise prices. But sometimes, the top line can get a boost from factors that are less impressive, such as acquisitions. Therefore, we seek some indication that a company's sales prowess amounts to something more than a one-shot boost. We require that sales growth be above the industry average over the latest three years.

- **Supporting Tests**

Having already narrowed the database down quite a bit using basic sales-related tests, we go the final distance by shifting to other indicators consistent with investment merit. We require a showing that at least some of the top-line strength translate to EPS, through a test requiring that company EPS growth exceed the industry average in the TTM period, the last

three years **or** the last five years. We also require that the consensus estimate for the current fiscal quarter be higher than where it was thirteen weeks ago. Finally, we add a test requiring that recent insider stock purchase transactions (net of sales) be greater than zero.

Contrarian Opportunities

Many investors like to buy stocks that are going up. And momentum players have made a lot of money doing this. But they've also lost a lot at times, and missed other opportunities. Sometimes, you simply have to focus on good companies and not worry if the stock has, in the short term, been moving the wrong way.

Rationale for this screen

From an emotional standpoint, it's scary to buy a stock whose price recently plunged or may still be in the process of falling. After all, we buy stocks because we want them to go up.

From a gut perspective, momentum investing—buying stocks because a stock's EPS and/or share price is rising—makes the most sense. And there's more here than good feelings. Over the years, plenty of investors have made a lot of money through momentum investing, in spite of the fact that theoretically, it's always been questionable and can be referred to as the greater fool theory (it's OK to overpay for a stock today if you can find a bigger fool to overpay even more in the future).

But stock market activity in late 2000 and early 2001 reminds us that momentum investing is, indeed, dangerous. It also reminds us that there's virtue to the opposite end of the spectrum, contrarian investing. The latter is based on the idea that you want to buy low and sell high and that in order to do this, you have to be willing to buy (or at least hold) when the stock is out of favor (which causes the price to be low).

The major objection to contrarian investing is the "dead money" argument. This approach acknowledges that downtrodden companies often have excellent long-term prospects, but suggests that there's no point in being early. Instead of leaving dead money in depressed longer-term plays, you're better off focusing on stocks that are performing better and leaving the long-term plays on a watch list; go into these companies later on, when it's clearer that improvement is nigh.

The dead money theory sounds pretty compelling on paper. And like momentum, it also worked in the real world for a long time. But times are changing. We've seen that stocks make increasingly large and rapid moves, up or down, in response to news. Today, we can see, what was once regarded as an entire market cycle's worth of share price movement in a matter of minutes.

This requires us to view contrarian investing in a new light. The momentum and dead money theories assume that the market presents investors with a reasonable number of entry and exit points for an individual stock. But that's happening less and less. If I see a company now, and I like its long-term prospects and hate the short-term scenario, I have only two practical choices. I can get in now and wait. Or I can cross the stock off my list because any development that would cause me to reassess the situation will instantaneously drive the stock high enough to wipe out the benefits of the long-term potential I see now.

Today, contrarian investors are those who are willing to be patient. This is different from an automatic pursuit of bad news. The idea behind the contrarian approach presented here is to invest in good companies whose shares have been hit by short-term adversity. That's why most of this screen's tests are geared toward ferreting out companies with demonstrated track records of long-term strength in a variety of areas. When you examine this screen's companies on a case-by-case basis (as should be done with any screen), identify the problem that caused the stock to fall. Ask yourself if it is indicative of structural problems that will be long-lasting, or if it reflects the kind of bumps in the road that hit even the best of companies from time to time.

Specific Screening Criteria

Here's how the screen was created:

- **The Stock Price**

Consistent with the overall theme of this screen, we start by seeking poorly-performing stocks. The screen requires the share price, over the past four weeks, to have suffered a decline of more than 15 percent and to have performed worse than the industry average share price percent change. Often, stocks will meet these tests because of an unfavorable earnings surprise, but we do not explicitly build surprise into this screen. That means that for these companies, the weak share price performance could also have been caused by an earnings-related pre-announcement that is not sufficiently detailed to show up in the database as a surprise, an analyst rating downgrade in anticipation of unfavorable developments, market pessimism due to bad news at another similar company, etc.

- **Good-Company Tests**

These are designed to find firms that can justifiably lay claim to the label "good company." We address this by insisting that companies outperform industry peers on a variety of measures over prolonged time periods. Notice that we don't focus on the latest quarter or Trailing Twelve Month (TTM) period. This screen prefers to look at the big picture, and tolerates recent mishaps. We don't assume that good things always happen to good companies and bad things only happen to bad companies. The screen is built upon the notion that over short time periods, bad things can happen to even the best of companies, and that investment opportunities come from the market's frequent failure to differentiate between good and bad companies and thereby excessively punish shares of better concerns.

- **EPS Growth:**

EPS must be above the industry average over the past five- and three- year periods.

- **Operating Margin:**

The five-year average operating margin must be above the industry average.

- **Return On Investment:**

The five-year average return on investment must be above the industry average. This is our preferred measure of management effectiveness in that it measures the ability of a

company to effectively utilize its capital without addressing how that capital is allocated between long-term debt and equity.

- **Return On Equity:**

Debt capital is generally riskier than equity. Companies willing to work with borrowed money, other people's money, can boost the amount they earn on whatever the shareholders have put into the business. This screen is willing to tolerate this sort of "leveraging up" so long as companies execute the strategy well. Hence there's a requirement that in addition to the return on investment test, five-year average return on equity must be above the industry average.

Favored Value Plays

Many investors believe that the only good values out there are to be found among stocks Wall Street rejects or ignores. That's not so. This screen helps you find reasonable value plays that are well regarded by the investment community.

Rationale for this screen

From an ivory tower standpoint, "value" is the only legitimate investing style. After all, how could any rational person buy a stock that is priced above its objective worth?

In the real world, though, life isn't nearly so simple. The factors that we need in order to calculate intrinsic value are so inherently uncertain as to seem doomed to futility. As a result, Wall Street culture evolved in a variety of directions. One is a focus on growth, especially short-term growth prospects. This approach figures very heavily in the recommendations analysts make. The other involves seeing value as a quest for dogs; very low stock valuation metrics for shares of troubled companies.

It doesn't have to be this way. Despite the practical difficulties inherent in assessing intrinsic value, **there's plenty of room for proper consideration of valuation metrics for shares of good companies, stocks that analysts favor.** This screen seeks these kinds of stocks.

Specific Screening Criteria

Here's how the screen was created:

- **Basic Metrics**

We establish the presence of reasonable valuation by requiring that each stock's Trailing Twelve Month (TTM) P/E ratio to be less than the industry average, and each Price/Sales ratio to be less than or equal to the industry average. We then require that the forward looking PEG ratio (the P/E calculated with reference to the consensus EPS estimate for the next fiscal divided by the consensus long-term projected EPS growth rate) to be no higher than 2.00. Many investors believe that PEG ratios should be no higher than 1.00. Such levels would, indeed, constitute very attractive valuation, and another one of our screens (Growth At A Reasonable Price) is based upon that theme. But in truth, the 1.00 PEG ratio owes more to folklore than the mathematics of stock valuation (which computes theoretical P/Es not just on the basis of growth rates but also with reference to interest rates, stock price volatility and dividend payout ratios).

- **In Favor**

To measure analyst sentiment, we use the average recommendation score. The average rating is calculated as follows: A Buy gets a score of 1.00. Outperform ratings get 2.00 points. Hold, Underperform, and Sell get 3.00, 4.00 and 5.00 points respectively. Then, we compute a weighted average of all the scores. Suppose a stock has three Outperform and three Buy ratings. It gets three points for the Buys (1.00 times three) and six points for the Outperforms (2.00 times three). The total of nine is divided by the total number of ratings

(six consisting of three Buys plus three Outperforms) to produce an Average Rating of 1.50. If we add four Hold recommendations to the mix, that adds another 12 points, bringing the overall total to 21. The Average Rating would be 2.10 (21 divided by 10 ratings). The screen requires that this score be less than 2.00 and that it be less than or equal to where it stood four weeks ago. We also require an increase, within the past four weeks, in the consensus EPS estimate for the current quarter.

Growth At A Reasonable Price (GARP)

Investors who want to buy shares of rapidly growing companies often find it necessary to accept steep P/E multiples. Other investors who are determined to purchase only reasonably-priced stocks often find themselves looking at relatively unexciting companies. Growth at a Reasonable Price (GARP) is an approach that reconciles both dilemmas.

Rationale for this screen

The "value" and "growth" approaches to investing are sometimes seen as being at the opposite ends of a spectrum. At one end, we find the stereotypical value investor, who will buy any shares that are priced inexpensively, even if the company's growth prospects are poor. At the other extreme, we see growth investors who will buy shares of companies that are growing rapidly without regard to how high a P/E multiple the shares might already command.

Growth At a Reasonable Price (GARP) reconciles the two approaches. It provides a framework for value investors who don't want to miss out on today's most promising growth opportunities. And it affords the growth-oriented investor a tool to help determine when a high P/E becomes too high. GARP is based on the principle that any P/E ratio is reasonable if it is equal to or less than the company's annual rate of earnings growth. In other words, one should be willing to accept a P/E multiple of up to 25 if the company's earnings are growing at an annual rate of at least 25 percent.

Specific Screening Criteria

Here's how the screen was created:

- **Growth**
We require that consensus projections of five-year EPS growth be at least 20 percent. Also, earnings growth in recent years must have been stronger than the average for the industry. We also require that the growth trend show some degree of acceleration by requiring that EPS over the past three years grew more rapidly than was the case over the past five years.
- **Quality of Growth**
Since companies can boost growth rates by taking on more risk, we check profitability ratios to see if management is taking on too much risk by unduly "leveraging up." The test we use is a requirement that the five-year average return on equity be no more than 20 percent above the five-year return on investment. To accommodate the fact that some businesses typically call for more debt than others, we allow a company to exceed that 20 percent threshold if the ratio of its five-year return on equity to five-year return on investment is no greater than the comparable ratio for the industry in which it operates. We also seek companies whose tax rates are at least 25 percent.
- **Stock Valuation**
We check to see that P/E is no higher than the rate of earnings growth. We do this two ways. First, we refer to the company's existing track record by comparing a P/E calculation

based on EPS over the Trailing Twelve Months (TTM) with EPS growth achieved over the past three years. Next, we compare a P/E calculation based on consensus estimates of next year's EPS with the projected five-year rate of EPS growth.

- **Depressed Equities**

Value investors often find many troubled companies coming to their attention because the low multiples they seek are often low for good reason: poor company prospects. This screen checks to see that each stock has demonstrated at least a respectable degree of market performance in the recent past. We do this by requiring that the share price be above where it was four weeks ago, or at least that the stock has performed better than its industry average over the past four weeks. The idea is to either find companies that are performing well, or turnaround situations that are actually starting to unfold and be reflected in stock prices.

Income Stocks

Dividends, the mainstay of stock valuation, were out of fashion for a long time, but they are coming back into favor now. But that doesn't mean all income stocks are created equally. This screen targets some of the better opportunities in this group.

Rationale for this screen

Dividends came back into vogue in a big way in late 2002 and early 2003. To some extent, this reflected a quest for perceived safe havens during the darkest days of a multi-year bear market, the idea being that as stocks fell, yields would rise so high as to attract new buyers, therefore cushioning against future declines. Another catalyst is talk of eliminating or scaling back unfavorable tax treatment accorded to dividends. (The same money is taxed twice; once as income to the corporation, and a second time as income to the individual shareholder.)

Both of the factors referred to above are valid reasons why income stocks merit attention (although the first argument would lose steam if company fundamentals are deteriorating to the point where the directors may find it necessary to reduce or eliminate the dividend). But there's more to the story than that.

Decisions to pay dividends and retain profits for reinvestment are crucial capital allocation decisions made by the corporation. And when push comes to shove, wise capital allocation may well be the premier yardstick for measuring management effectiveness.

During the 1980s and 1990s, we were in what one might refer to as an era of "financial machismo," when it seemed that just about every company out there saw itself as a super-growth vehicle. That led to low dividend payout ratios, as firms retained the lion's share of profits to reinvest in growth ventures. (The double-taxation issue was often cited as justification for high profit retention, but you could easily argue that this was a rationalization for a decision that would have been the same regardless of tax considerations.)

In truth, many companies are mature, and don't have nearly the growth opportunities they and the investment community at large thought they did. There's nothing wrong with this. Humans cease to grow vigorously when they reach adulthood, yet that period is the main portion of their lifecycle. Companies can be productive and valuable even if they don't grow as rapidly as they did in their formative years. But the financial machismo era blinded many investors to such considerations.

Then, after the tech bubble burst starting in 2000, the investment community took notice of the spate of write-offs. Much of the rhetoric centered on efforts to distract investors from those charges by focusing them on *pro forma* earnings and the like. But another, perhaps bigger, aspect of the story is the extent to which the write-offs reveal the shortcomings of financial machismo. One cannot help but think about the corporate events leading to the write-offs (failed ventures, misguided acquisitions) and wonder how much stronger many companies, and the economy itself, would be had that capital been returned to shareholders as dividends instead of being squandered on futile efforts to show more growth than was really feasible.

In screening for income stocks, we obviously seek yield. But we also seek companies that are less tied to the financial machismo culture. In other words, we're looking for companies that have realistic notions of how much they can grow, how much capital they can productively reinvest in the business, and how much capital they should pay to shareholders. **A 2002 study by Reuters of such companies demonstrates that over the long haul, their shares have fared better than many realized at the time.**

Specific Screening Criteria

Here's how the screen was created:

- **Minimum Yield**

We start with a requirement that the stocks have current yields of at least two percent.

- **Dividend Growth**

Dividend growth (a different sort of growth from the financial machismo growth culture discussed above) is a key element of an income investment. The fact that dividends grow over time is why investors are usually willing to accept current yields below prevailing rates on fixed income securities. This screen requires that over the past three years, the dividend growth rate was above zero and at least ten percent higher than the industry average dividend growth rate.

- **Payout Ratio**

Addressing payout ratio (the percent of net income paid to shareholders as dividends) requires a balancing act. On the one hand, we want the ratio to be high; we want capital allocation decisions that have, at the very least, a healthy respect for the benefits of distributing income to shareholders. On the other hand, we don't want payout ratios to be so high as to threaten the ability of the company to properly run the business. This screen addresses the balance by requiring Trailing Twelve Month (TTM) company payout ratios to be no greater than 25 percent above the industry average ratio.

- **Dividend Safety**

Unlike payments on bonds, maintenance of the dividend is not legally required. So we need to consider tests that reduce the odds we'll wind up with companies that find it necessary or desirable to reduce or eliminate their dividends.

- We require that over the past five years, the rate of capital spending growth was greater than zero and no less than 90 percent of the industry average. Companies that have spent in the past are less likely to have pent-up needs that might, in the future, reduce the company's dividend-paying capacity.
- Perhaps the ultimate warning about the future of dividends comes in the form of a yield that's too high. The market may not be as efficient as academicians often claim, but it's not stupid either. Often, a yield climbs too far when investors fear that the payout will be reduced or eliminated. We screen out such situations with a test requiring that today's

relative yield (company yield divided by industry yield) be no more than ten percent above the five-year average relative yield.

Relative Value

Traditionally, value investors want to buy stocks with valuation ratios, such as P/E or Price-to-Sales, below a certain level. One way to select appropriate thresholds is to compare individual stocks to relevant benchmarks.

Rationale for this screen

At first glance, value investing seems easy. All you need do is select stocks with low P/E ratios (or Price-to-Sales ratios, Price-to-Book Value ratios, etc.). But in fact, value investing presents some serious challenges.

The first issue a value investor confronts is how to establish an appropriate threshold for P/E or any other ratio he might want to use. At one time, it was assumed that it was a good idea to look for stocks with P/E ratios of 8.00 or less. Try following that approach today!

In theory, you could simply raise the target from 8.00, to 15.00, or 20.00, or whatever number seems reasonable in light of current market conditions. But the more you think about it, the less comfortable you're likely to be. After all, regardless of market environment, you don't want to simply pull numbers out of a hat. To feel confident about investment decisions, you need to understand why your criteria are reasonable.

GARP (Growth At A Reasonable Price) investors solve this dilemma by using P/E thresholds that are based on rates of EPS growth. A P/E that's higher than the growth rate signifies a richly valued stock. A P/E that's less than the growth rate means the stock is undervalued. This is a very reasonable method, but it's not the only option for value investors.

Like most stock-selection criteria, GARP is a general guide that serves to spotlight issues, rather than give hard-and-fast answers. In other words, there may be reasons why a value investor might accept a P/E of 30.00 for a company whose EPS are projected to grow at a 25 percent annual rate. One justification might be an expectation that the 25 percent growth forecast is too low. Another might be that shares of similar companies have P/E multiples ranging from, say, 35.00 to 45.00. The latter situation is the focus of this screen.

Relative value assumes the marketplace sets prices in such a way that similar assets have similar valuations. It assumes that anomalies will eventually be corrected by a decline in the price of an excessively valued asset, or a rise in the price of an undervalued asset.

Intellectually, you could throw some darts here and, perhaps, say that the 30.00 P/E is the only correct one and that the shares of all other companies will move lower. But day-to-day experience teaches that the tail doesn't usually wag the dog. What often happens is that isolated cases move toward the crowd. So if you see a P/E of 30.00 and a peer group average P/E of 45.00, you can reasonably assume the 30.00 P/E will move toward the peer group average.

This leads us to the other major issue value investors must face. A generation or so ago, one might have said that a stock has a low P/E ratio because many people don't realize how good the

company is. But we're now living in an information revolution. Today, you can still find stocks that are undervalued because of neglect, but you have to search much harder than in the past. With so many investors knowing so much about so many companies, many stocks have low valuations because their prospects are poor.

Analytically, your task is to look at a seemingly undervalued company to see if you can identify some fundamental reason to explain why those other companies whose shares command higher P/Es aren't really as similar as you first assumed. If your company is better than the group, you can be bullish on its stock. If your company has some particular problem not shared by the others, you may want to avoid the stock. This is the way you should look at stocks appearing on a relative value screen.

Specific Screening Criteria

Here's how the screen was created:

● Valuation Ratios

We start by examining some basic valuation ratios and comparing companies with their respective industry averages. A rigid approach would simply require that the ratios be equal to or less than the industry averages. But we're going to be a bit flexible, since we want to be sensitive to the fact that superior companies tend to command higher valuations.

- We examine Trailing Twelve Month (TTM) ratios for Price-to-Earnings, Price-to-Sales, and Price-to-Free Cash Flow, and in each case, we require that the stock's ratios be no more than 10 percent above the industry average.
- We also require that the P/E-to-Growth (PEG) ratio be at or below 2.00. That's higher than would be allowed under the Growth At A Reasonable Price method, but this screen will allow a PEG ratio to reach 2.00 if it's a favored industry normally characterized by high multiples.

● Strong Companies

The following tests are designed to filter out situations in which low stock valuation reflects lackluster company prospects. In fact, it leans a bit in the other direction by actively seeking strong companies.

- The screen requires that EPS growth rates for the latest twelve month period and for the past three years be at least 25 percent better than the industry average growth rates over those same periods.
- The above tests go a long way toward favoring good companies, but they aren't perfect. We must remain sensitive to the possibility that a company with strong historical performance may soon take a turn for the worse. We examine this by comparing company share price performance (over the past four weeks) to the average performance of other shares in the same industry. It's unlikely that companies will meet

this test if investors see trouble looming on the horizon. Note that we don't require the stock to have appreciated in the past four weeks; we only require performance that's above the industry average. Hence this test will tell us what we want to know, in the context of this screen, even during periods of market weakness.

Fastest Turnover

All else being equal, the higher the margins, the better the company. But all else is rarely equal. Turnover can help you uncover attractive companies others might brush aside because of low margins.

Rationale for this screen

It seems as if everybody nowadays looks closely at profit margins. There's nothing wrong with this. Margins tell you how many cents out of each sales dollar are left as profit after subtracting all expenses. Higher is better. It's an easy concept to understand and it's an easy concept to like.

But there's more to life than margins. There are big-ticket products that sell infrequently, but when these sales occur, they often fetch big profit margins. At the other end of the spectrum, there are low-ticket items, such as groceries, that net the seller only a few pennies per dollar as profit but are sold so frequently as to make for a very lucrative business. Turnover is a method of measuring the frequency of transactions.

As an investor, you want to consider turnover because it's a useful gauge of fundamental strength. But better still, turnover can help you spot good companies that are being neglected by other investors. Nowadays, many investors fully understand the importance of healthy margins. But turnover gets far less attention. And in the investment world, undue neglect creates interesting opportunities.

There are several different kinds of turnover:

• **Receivable Turnover**

Accounts Receivables represent money customers owe you for goods already sold or services already rendered. Assuming your customers or clients pay their bills when due, you will eventually collect all of these Receivables. Receivables turnover measures how quickly you receive that money. We calculate the ratio as Trailing Twelve Month (TTM) revenues divided by average receivables.

- Suppose you sold \$100 million worth of goods or services in the past 12 months. Suppose too, that on average, your Accounts Receivables over that span stood at \$20 million. Your Receivables Turnover ratio would be 5.00.
- Now suppose you hire an efficiency dynamo to lean on your customers and get them to pay more quickly. You may find yourself with fewer outstanding Accounts Receivable, say \$10 million on average. Now, your Receivables Turnover ratio would jump to 10.00 (\$100 million in revenues divided by an average Receivables balance of \$10 million.) You're better off because money that is owed to you spends more time in your hands than in the hands of your customers. So all else being equal, higher turnover is better than lower turnover.

- **Inventory Turnover**

This tells you how fast you sell the products you hold in inventory. (It is calculated as TTM Cost Of Revenues divided by average inventory). You spend money to build/buy inventory. This may involve purchasing raw materials for your factories to use in order to create finished products. Or you may buy merchandise from a wholesale distributor that you'll eventually sell through your retailing operation. Either way, you're out the money you spent while you're holding onto the goods. So you want to move your inventory as quickly as possible to get the products into the hands of paying customers. So, as with Receivables, all things being equal, higher levels of Inventory Turnover are better than lower levels of Inventory Turnover. At the very least, holding inventory can cost you money (you may have to pay interest on money you might have borrowed to tide you over until you can receive proceeds from the sale of your inventory). Analysts often view deterioration in inventory turnover as a sign that the company's future looks dim. For a struggling company, one that has trouble getting trade credit, excess inventory can threaten corporate viability.

- **Asset Turnover**

This can be a difficult concept to grasp. It is calculated as Revenues divided by Average Assets. But the definition of assets is somewhat "conceptual." Assets are the sum total of what you paid for everything you own, minus depreciation charges. We could nit-pick the definitions. But it will be easier for you to grasp asset turnover if you think of it this way: You have a certain amount of your money, say \$25 million, tied up in a business (let's assume you have no long-term debt and your plant and equipment are all new). If your annual revenues amount to \$100 million, your investment has been returned, in the form of revenue from customers, four times over the course of the year (\$100 million divided by \$25 million). Your asset turnover would, then, be 4.00. Again, higher turnover is better than lower turnover, all else being equal.

A common theme here is that higher levels of turnover mean you're getting your money more quickly. High Receivables Turnover means your customers are paying their bills more quickly. High Inventory means your customers are buying goods more quickly. High Asset Turnover means you're getting money from your business investment more quickly.

If you have a choice of two business opportunities, is there ever a reason why you'd want to go into a business that pays you more slowly? Of course! You may accept lower turnover if the business compensates by offering higher margins. The reverse is also true. Higher turnover can make it worthwhile for you to accept lower margins.

Specific Screening Criteria

Here's how the screen was created:

- **Turnover Data**

We require that companies exceed their respective industry averages by more than 25 percent in terms of Trailing Twelve Months (TTM) Receivables Turnover, TTM Inventory Turnover, and TTM Asset Turnover. When looking at turnover, it's very important to

compare an individual company to its industry average. Otherwise, the screen would systematically exclude companies in industries that are normally characterized by high margins and low turnover. By using industry comparisons, we see turnover as an indicator of superior corporate efficiency within an industry, as opposed to a judgment on the financial profile inherent to a given industry.

• **Supporting Criteria**

We've often said that screening is not just a science, but also an art. There are countless ways in which atypical events can produce numbers that don't truly depict a company's underlying fundamentals. So we use what we refer to as supporting criteria (screening tests that relate indirectly, if at all, to the main focus of the screen) that help point us toward companies that met the main test(s) because of legitimate fundamental strength, as opposed to statistical aberrations. This screen uses two supporting criteria:

• **Return On Investment:**

All else being equal, companies with above-average turnover tend to have above-average returns on investment. This screen requires that each company's five-year average Return on Investment be above the five-year average Return on Investment for its industry.

• **Earnings Expectations:**

Whatever fundamental themes we pursue, it's always useful to remember that EPS trends are important determinants of share price performance. The second supporting criterion for this screen is a requirement that the present day consensus EPS estimate for the current fiscal year be equal to or above where that estimate stood eight weeks ago. We could arguably have used a more rigid EPS test, one that measures growth as opposed to revision. But our decision to look instead toward revision is based on a desire to stay within the broad fundamental theme of the screen. A focus on turnover is not really aimed at momentum investors (we have other screens based on that approach) but instead at those who are more willing to be patient with "good companies," even if the stocks aren't presently hot. So rather than tilt the screen toward hot stocks, we decided to use the last supporting test to tilt the screen away from companies most likely to be cold (those that have been hit by negative estimate revisions).

Industry Leaders

What's a good profit margin? How much debt is too much? How high a growth rate should you expect? Often, the best way to answer such questions is to compare an individual company to others in the same industry.

Rationale for this screen

Working with data can become easy, fun, and powerful if you understand the following: (1) Data items are most powerful when compared to other data items. (2) Data items are rarely useful when viewed in isolation. (3) The key to sound fundamental analysis involves deciding what comparisons to examine.

Consider net profit margin (the percentage of each sales dollar left as profit after subtracting all expenses). Suppose you see that ABC Corp. had a net profit margin of 8.00 percent in the Trailing Twelve Month (TTM) period. Is that good?

Let's go further. Suppose you also learn the average net margin of companies in the same industry as ABC Corp. was 6 percent. Now a picture of ABC is starting to emerge.

We still don't know if an 8.00 percent profit margin is good. But we're losing interest in the question. It can be much more productive to ask how ABC's net margin stacks up against its industry average. It would also be interesting to ask how ABC's TTM margin compared with its five-year average margin.

The bottom line is that we learn nothing about ABC when we are told its net margin is 8.00 percent. To make the data useful, we need to compare it to one or more other data items. We've already seen that we can learn useful things if we compare the number to an industry average and/or ABC's own five-year average.

This is not, by any means, a scientific process. Often, you'll see companies that exceed some benchmarks but fall shy of others. Some companies will barely exceed benchmarks while others will outperform them by wide margins. So there's lots of room for debate as to which benchmarks will be used and how strict the comparisons should be. But when you analyze companies, you can't get the right answer unless you're asking the right questions. And comparative analysis will often steer you toward some of the most important questions you can ask.

When you do comparative analysis, break the task into two components. One is a cross comparison that measures data items against external benchmarks. The ratios report found in our Stocks section presents three important benchmarks you can use here: the industry average, the sector average, and the S&P 500. The other component is a time series comparison that measures current data items against past performance. The most common time series comparison matches the TTM data item with a five-year average. For growth rates, it's also useful to compare data items for the Most Recent Quarter (MRQ) with the TTM figures.

This screen is a cross comparison focusing on company-to-industry match-ups.

Specific Screening Criteria

Here's how the screen was created:

- **The Stock**

Over the past four weeks, the company's share price must have performed at least 10 percent better than the average achieved by other stocks in its industry. Also, the TTM P/E multiple must come in no higher than 10 percent above the industry average. When creating a screen like this, it's tempting to search for P/Es that are below the benchmark. But if we want companies that exceed benchmarks in a variety of ways, we are probably best off accepting the fact that shares of good companies will probably command premium P/E ratios.

- **Growth**

We require that Sales and EPS growth over the past five years each exceed industry average figures by at least 10 percent. In one departure from the screen's cross-comparison structure, we also seek companies whose EPS growth over the past five years exceeded its five-year rate of Sales growth.

- **Profitability**

The net profit margin over the past 12 months must be at least 10 percent greater than the industry average net profit margin.

- **Debt**

Comparative analysis is especially important when looking at balance sheets. Some industries are normally more debt-oriented than others (try to find a bank that has no debt). If you automatically eliminate all companies with "high" debt, you may wind up missing some very attractive investment opportunities. This screen requires the total debt to equity ratio in the latest quarter to be below the industry average ratio.

Return On Investment

Momentum, which means buying what's hot, plays a big role in today's stock market. But we've all heard the virtues of investing for the long-term. Even so, it's hard to invest when you suspect your new stock may not blast off overnight. You can use Return on Investment as an important indicator to determine whether or not a particular company merits patience.

Rationale for this screen

Imagine you're looking at what you believe to be a very interesting company, say a micro-cap in a seemingly mundane business. Perhaps there's intriguing growth, such as a series of acquisitions within what is now a highly fragmented market. The PEG ratio is extremely low. But you see some baggage. Perhaps the company has some exposure to higher interest rates and/or a slowdown in the pace of economic activity. In sum, perhaps it's a case of a nice company with questionable timing.

What should you do about such firms? If you're an active trader, the answer is easy: pass them by and come back when the timing is right, assuming you can confidently determine when that will occur. But while the media shines its spotlight on day-trading, the fact remains that there are still many fundamental investors out there who are willing to invest in companies they deem attractive and hold the securities for a number of months or years.

It's unlikely that anyone would ever buy shares if they actually expect the price to decline, even if for only a short time. But predicting things like this isn't so easy. Are interest rates really going to trend upward over a long period, or will they stay in a more-or-less horizontal trading range? Are we really going to have a recession in the foreseeable future, or will occasional periods of slower growth continue to prove sufficient in preventing excesses from building in the economy. In other words, might the interesting new stock you found settle into a better opportunity to buy later at a lower price? More importantly, can you really predict such things?

If you are a long-term fundamental investor, and you believe you found a good company but are uncertain about the timing, you may be best off ignoring the question. In other words, buy the stock and don't worry if it falls in price. You would have good company if you were to do that. In "The Warren Buffett Way" by Robert G. Hagstrom, Jr., on page 54, the author described Mr. Buffett's view of this dilemma as follows:

When Buffett purchased Wells Fargo, the stock price had declined 50 percent from its high. Even though Buffett had purchased some shares of Wells Fargo at higher prices, Buffett welcomed the decline in price as a means of purchasing the shares at cheaper prices. According to Buffett, if you expect to continue to purchase stocks throughout your life, you should welcome price declines as a way to add stocks more cheaply to your portfolio. It's not easy to view equity investing this way. Warren Buffett is able to do it because he's confident that his methods of assessing opportunities help him allocate capital to what he regards as good companies. Mr. Buffett has a variety of criteria he uses to analyze firms. One important consideration for him is Return on Equity, or profits as a percentage of shareholder money that has been invested into the business. A high return indicates that management is doing a good job using capital that has been invested in the business. And companies with high

returns have the wherewithal to generate good rates of growth without taking drastic steps, such as making acquisitions.

When you read about returns on investment, you are more often than not reading about returns on "equity," the capital contributed by the owners of the business (the stockholders). But that's not the only way to measure management effectiveness. A company can sharply boost returns on equity by skillfully putting borrowed money to work alongside the capital contributed by owners.

"Return on Investment" is a more pure measure of management's success in operating the business. "Investment" is defined as equity plus all long-term liabilities (mainly, long-term debt). In other words, Return on Investment measures management's operating skill, while Return on Equity measures a combination of operations and financial skills.

High Returns on Investment indicate that management is good at running the business. That's an important factor in any decision you may have to make about whether or not you're willing to hold a stock, even if it falls in price after you buy it. The idea is that you're willing to forego any effort to time the market and instead identify and stick with winning management teams and business models.

By the way, don't assume that shares of high-return companies will always take forever to shift into high gear. If other favorable factors are at work (earnings growth, for example), shares of high-return companies can take off as quickly as any other issue. The key here isn't so much that you'll need to be patient with these stocks. Instead, think of high-return companies as situations in which you can feel more comfortable being patient, should that become necessary.

Specific Screening Criteria

Here's how the screen was created:

- The company's Return on Investment over the Trailing Twelve Months (TTM) must have been more than 20 percent above the average TTM Return on Investment for its industry.
- The company's average Return on Investment over the past five years must have been more than 20 percent above the industry average five-year average Return on Investment.
- The degree of superiority we see in a company's TTM return compared with its industry average (company return divided by industry average return) must be more than 20 percent better than the degree of superiority we see when we look at the five-year average.
- The company's TTM return on investment must be more than 20 percent above its own five-year average return.

These tests produced a list of companies with returns on investment that were superior compared with the past and with industry peers. By now, we've filtered out most of the Reuters database. Even so, the list remains too big to justify case-by-case analysis. To get a more

manageable list, we add two more tests designed to tap into recent investment community sentiment.

- The consensus EPS estimate for the current (or soon to be reported) fiscal year must not have been reduced over the past eight weeks.
- The number of shares purchased by institutional investors over the latest quarter reported by each institution must be greater than the number of shares sold.

Strong Operating Margins

Margins tell you how many cents out of each sales dollar are left, after expenses, as profit. That's the easy part. The hard part is deciding which margins you should look at. Gross margins? Pretax margins? Net margins? EBITD margins? This screen is based on strength in Operating margins.

Rationale for this screen

The operating margin measures how much profit is left after deducting the basic expenses of running a business. The best way to understand this definition is to compare operating margin with the alternatives.

- **Gross Margin**

This tells us how much profit is left after subtracting costs that are necessary to actually produce the goods or services the company sells. For a manufacturing company, this would include the costs of raw materials, salaries of factory workers, etc. For an airline, gross expenses include fuel, salaries of the flight crew, etc.

- **Operating Margin**

We know that fuel expenses are deducted when we calculate an airline's Gross Margin. What about the salary of the corporation's Chief Executive Officer? Fuel expense is a "direct" cost of running an airline; this expenditure is clearly and specifically tied to the activity that produces revenue. The CEO's salary, although an essential part of maintaining the business, is not specifically tied to the process of getting passenger-filled planes up into the air. This is an "indirect" cost, or put another way, overhead. Operating Margin tells us how much profit is left after subtracting direct costs and overhead.

- **Other Margins**

The EBITD Margin is similar to the Operating Margin except that the EBITD does not subtract non-cash depreciation charges. The Pretax Margin accounts for all expenses except taxes. And the Net Margin tells us what's left over after deducting ALL expenses.

The best margin to examine depends on what you want to know. Operating Margin is a very effective gauge of the performance of a company's BUSINESS activities. This is not the same as measuring the performance of the COMPANY itself.

Suppose two firms in the same business incur the exact same expenses for direct and overhead costs, but Company A has a lot of long-term debt while Company B has none. Operating margins for A and B will be identical, but A's pretax and Net margins will be lower because of interest expense. Considering another example, two companies can have the same Pretax Margins, but different Net Margins due to variations in tax rates (one company may operate in lower-tax states or countries). So if you want to assess the overall cost-efficiency of the entire corporate enterprise, pretax and net margins are useful.

The EBITD margin is one that periodically becomes very popular in the investment community. It helps you see how much cash a business generates year in and year out. But be careful

about relying too heavily on this. If you want to look at the "economic performance" of the business, you should not rush to dismiss depreciation, which represents an allocation for plant costs. We can debate the wisdom of accounting rules that dictate how depreciation is calculated, but one cannot deny that some sort of plant cost ought to be recognized as part of an overall evaluation of business performance, since these costs are necessary to get the enterprise off the ground and stay in peak operating condition.

Comparing Operating and Gross Margins raises more delicate issues. On the one hand, it can be argued that Gross Margin is a more perfect measure of business performance and that overhead ought to be seen as affecting the caliber of the overall company, not the business itself. There is much merit to this. But it's important to realize that Gross Margin comparisons among different companies, even within the same industry, may not always be apples-to-apples. That's because there are occasions when it becomes a matter of accounting judgment as to whether a particular cost should be considered direct or overhead.

In sum, operating margin is a good way to assess the overall economic success of a company's day-to-day business activities, and it is a measurement that will often provide meaningful comparisons when you compare more than one company.

Specific Screening Criteria

Here's how the screen was created:

- First, we required that each of the companies have operating margins that are above the averages for their respective industries. This above-average performance is measured for the Trailing Twelve Month (TTM) period, and again based on an average of the five most recently completed years.
- Next, we require that each company's margins improve over time. The screen picked up only those firms whose operating margins in the TTM period were at least 25 percent above their five-year average operating margins.
- By this point, we've eliminated many companies. But the list is still too big for company-by-company review. So we use the following tests to narrow it further.
 - The company must exceed the industry average in terms of five-year return on equity, five-year return on investment, or five-year return on assets.
 - EPS growth for the TTM period must exceed the industry average.
 - Analysts must have raised their estimates of current-quarter EPS during the past four weeks, or the average analyst rating must have become more bullish (i.e. a lower numeric score) during the past four weeks.

Consensus Choices

You can follow analyst recommendations or chart your own course. But it's hard to deny that the recommendations influence stock price performance, at least over the near term. Here's what the brokerage house analysts like now.

Rationale for this screen

It's hard to ignore what Wall Street analysts have to say about a stock. For better or worse, most of them deal with institutional portfolio managers who buy and sell stock in large quantities. When these money managers react to an analyst's recommendation (and they typically do this, if not simultaneously, then within a fairly small window), the basic law of supply and demand pretty much dictates that the stock will move the way the analyst thinks it will.

Suppose you roll up your sleeves and do your homework on XYZ Corp. and decide the stock is a screaming buy because you expect profits to soar in the fourth quarter of the year. Let's also suppose all of your assumptions are accurate. But what will happen if the analysts that follow the stock are disappointed by what they hear about the near term and lower their ratings? Their clients will sell, or at least reduce their positions in the stock.

Do the math. You are a single decision maker. However much money you have in your portfolio(s), you are still just one investor. But the analyst has many clients. If you are the only one not following the analyst's advice, your bullishness will be overwhelmed, at least in the short term, by the large number of Sell orders. The impact is magnified if other analysts adopt the same stance and influence their institutional clients as well.

This shouldn't cause you to blindly follow analyst recommendations. As we move through the year and analysts start focusing on the same good things you saw earlier on and start raising their ratings, the stock will return to favor. But if you don't at least know how the analysts rate stocks, you may churn your portfolio needlessly.

Going back to our example, if you know that shares of XYZ are plunging because analysts lowered ratings due to their pessimism about the next quarter, you can nevertheless make a knowledgeable choice to stay the course based on your assumptions about subsequent periods. But if you ignore the analysts, you may simply misinterpret bearish signals in every technical indicator you can think of and wind up shelving your assumptions and selling your shares at a price that is at or near a major bottom.

The strength-in-numbers argument, by itself, underscores the importance of knowing how analysts rate stocks even if you believe those who say analysts are all biased and that their conclusions are flawed. But in truth, most analysts are hard working, highly skilled professionals who make great efforts to develop and communicate accurate assessments of the companies they cover.

As confirmed by the news flow in recent years, analysts have had conflicting agendas.

Nowadays, most investors know how reluctant analysts have been to issue bearish

recommendations about a stock if their firm is doing investment banking work for the same company. Regulators are working aggressively to address that situation.

But it's not that simple. Less well-known are the considerable competitive pressures on analysts (from their institutional clients) to get it right. There are a variety of organizations that monitor and assess analyst performance. Some use quantitative measurements. Others rely on surveys conducted among institutional portfolio managers. Scoring highly can have a major impact on the earning power of individual analysts. And the way to score highly is to get it right more often than your competitors.

But even in the best of circumstances, analysts are human, so they won't always make correct predictions about the future. And often they do overestimate the extent to which they can accurately forecast certain issues. But you can generally count on them for accurate assessments of the present and the relevant past.

There has been much discussion of the traditional reluctance of analysts to issue a "Sell." That is a concession that even the best of them make to the politics of their business. That, too, is being addressed by reform efforts. But aside from that, if you learn to read between the lines, it's really quite easy to discern their true sentiment about a stock.

First, ignore target price ranges, which are published mainly for cosmetic reasons. To give you an idea of how tenuous these are, consider that the analysts never explain how much of the supposedly projected price change is due to market factors and how much is due to company-specific considerations. What you really want is a sense of whether they believe the company is likely to outperform, more or less match, or underperform the market as a whole.

Traditionally, Wall Street rates stocks on a five-part scale. Each firm has its own terminology. What's most important is whether the stock has the top ranking (whatever the firm calls it), the next-highest ranking, or lower. For the sake of convenience, Reuters uses a common set of labels for each rank, starting with (1) Buy, (2) Outperform, (3) Hold, (4) Underperform, and finally (5) Sell.

As noted, Underperform and Sell ratings have been rare sightings. But analysts have always been uninhibited about shifting ratings among the top three categories. **As a result, I found it useful** to view the top Buy rating as the functional equivalent of a sincerely bullish stance, the Outperform rating (the middle of the threesome typically used by analysts) as the functional equivalent of neutrality, and the third rating, formally labeled Hold, as the functional equivalent of a bearish stance. **This approach allowed me to examine** the distribution of ratings for an individual stock to get a pretty good picture of what the analysts truly think.

As of early 2003, it appears that the five-part scale is giving way to a three-part scale simplified to Buy, Hold, and Sell. And firms are working harder to generate a reasonable percentage of Sell recommendations. It's too early to tell how this will map into the old five-part scale.

The 2/26/03 revision to this screen addresses this by shifting attention from the ratings

themselves to a score we compute based on a weighted average of all the ratings. The score indicating maximum bullishness is 1.00; the score indicating maximum bearishness is 5.00. (The computational method is described below.)

Regardless of how firms map new three-part rating scales to the old five-part system, we know two things that are important for screening purposes: (1) Scores below 2.00 are bullish. (2) A decrease in the numeric score over time (i.e., a shift from 2.35 to 2.15) indicates an increase in bullish sentiment.

Specific Screening Criteria

Here's how the screen was created:

- **Bullish Sentiment**

The stock must have an average rating less than or equal to 1.75. The average rating is calculated as follows: A Buy gets a score of 1.00. Outperform ratings get 2.00 points. Hold, Underperform, and Sell get 3.00, 4.00 and 5.00 points respectively. Then, we compute a weighted average of all the scores. Suppose a stock has three Outperform and three Buy ratings. It gets three points for the Buys (1.00 times three) and six points for the Outperforms (2.00 times three). The total of nine is divided by the total number of ratings (six consisting of three Buys plus three Outperforms) to produce an Average Rating of 1.50. If we add four Hold recommendations to the mix, that adds another 12 points, bringing the overall total to 21. The Average Rating would be 2.10 (21 divided by 10 ratings).

- **A Bullish Trend**

The present average rating must be less than where it stood four weeks ago, and the four-week-ago rating must be equal to or less than the thirteen-week-ago rating.

- **Homework**

To guard against stocks that "benefit" from so-called "throwaway" ratings by just one analyst, we require that at least one analyst go beyond the near term and publish a projection for long-term EPS growth.

- **Supporting Criteria**

We double-check analyst sentiment by requiring that short interest be no more than three percent of the float, or that it be a lesser percent of float than was the case a month ago. We also put a ceiling on valuation by requiring the PEG (P/E-to-growth) ratio to be no greater than 2.00. (In computing PEG, we use a P/E calculated with reference to the consensus estimate of EPS for the next fiscal year, and the long-term growth projection.)

High P/E Multiples

This is not a typographical error. This P/E-oriented "Best In Class" screen really is designed to seek stocks selling at high multiples, not low ones.

Rationale for this screen

Conventional wisdom tells us to avoid stocks that carry high P/E multiples. Nowadays, that maxim has been tempered a bit by the PEG ratio, which is an analytical tool that justifies buying high-multiple stocks if the P/E ratio is less than the rate at which earnings per share are growing. But even users of PEG are still staying more or less within the standard approach to stock selection. They try to get the lowest valuations feasible under the circumstances. Low valuations easily appeal to the most basic common sense idea of buying low and selling high.

So why are we presenting a stock screen designed to find stocks that command high P/Es? The answer is quite straightforward. In this day and age, with financial information so accessible to all members of the investment community, you cannot assume that someone who purchases a stock sporting a high P/E multiple does so out of ignorance. Assume that buyers know what the P/E is, and assume they know the P/Es are high relative to industry or market benchmarks. Someone who buys any stock under conditions like that typically does so because they believe that the multiple is justified by the company's prospects.

If you assume that high P/E multiples reflect optimistic growth expectations, you might think it's a good idea to simply invest in those stocks that have the highest P/E ratios. But data screening isn't just a science; it's also an art. When drawing from a list of investment candidates as large as the Reuters active database (more than 9,000 stocks) there are many variations on any theme and we need to adapt our screen in such a way as to enhance the probability that each individual high-multiple equity will, in fact, be consistent with our starting assumption.

We also know that a simple list of high P/E stocks with the highest P/E ratios will likely be concentrated within a few hyper-growth sectors (e.g., technology, internet). There's nothing necessarily wrong with this. But many investors may wish to choose from a broader range of industries. This screen is designed to draw stocks from a variety of groups using high P/E multiples as an indicator of favorable expectations.

Specific Screening Criteria

Here's how the screen was created:

- **High P/E multiples**

We start by requiring that each stock's Trailing Twelve Month (TTM) P/E multiple be at or above its respective industry average and that the multiple be above that which prevailed for the prior twelve month period. By measuring the P/E against the industry average, we assure that no company is automatically excluded because it is in an industry that normally commands low P/E multiples. This screen can draw from any industry, so long as investors expect more from the company than they do from its peers.

- **P/E no more than 200**

This test is designed to eliminate companies whose multiples may reflect some sort of aberrant condition, as opposed to investment community expectations of strong growth. For instance, a slow growing firm whose TTM earnings per share are temporarily depressed, to say a few pennies per share, may be eliminated by the screen (some companies like that will slip through, but they will ultimately be eliminated by the next screening criterion). Other eliminations will include early-stage growth companies for which P/E may not be the best stock valuation metric.

- **Year-to-year growth in share earnings positive and in excess of the industry average, and a three-year EPS growth rate above the industry average**

This is a very important test since it will weed out companies that have high multiples because of share prices that failed to fall in tandem with depressed earnings. The latter part of this test, involving the three-year growth rate, weeds out generally sluggish companies with stock prices that may be elevated in anticipation of an unprecedented growth spurt. There are better screens we can create to pursue investment opportunities of this sort.

- **Analytical Coverage**

We require that each stock be covered by at least three analysts. This enhances the probability that favorable expectations will have come about as a result of careful, professional analysis. This isn't a sure thing. Note, though, that analyst ratings on some of these stocks may be lackluster. But stock valuation can be a very personal thing. Often, investors will appreciate and utilize an analyst's assessment of a company but disagree with the analyst's opinion on the stock. Clues about such situations can be found by looking for modest ratings under the Professional Analysis section of the Reuters stocks area.

- **Declining Short Interest**

This adds some active support to the notion of favorable expectations in that it limits us to stocks for which short sellers (hard-core bears) are reducing their positions. A stock whose P/E is unjustifiably elevated would seem more likely to show a short interest that is rising, rather than falling.

Insider Buying

Corporate insiders presumably have good information on company prospects. So when they buy shares of their own companies, the investment community would do well to take notice.

Rationale for this screen

Who better to look to for a sense of a company's merits than those who work there; i.e. corporate insiders. In theory, we'd like to simply ask them for the scoop on what's happening, but such direct pipelines are likely to run afoul of modern securities laws. Even official communications are tightly regulated such that no single investor can get information that isn't available to all. These restrictions are not necessarily troubling. We can easily tap into them by using screens that reflect positive analyst sentiment (since analysts keep track of all such disclosures).

But we can also indirectly monitor sentiment on insider opinions that are not officially disseminated. We cannot look to what they say, but we can look at what they do; specifically their purchase transactions.

This isn't a silver bullet. Some insiders may be buying to exercise stock options with the intent of immediately cashing them out. But there are enough insider buy transactions based on favorable opinion (purchases made with the intent to hold) that it's worth screening on this basis and subjecting companies that make this screen to individual case-by-case assessments of underlying merit.

You might think we could say the same about insider selling, but that's a more tenuous point. Basic financial planning principles call for diversification. As such, it is imprudent for people to rely on one company for salary and their entire investment portfolio. Hence it is usually wise for insiders to convert stock options they receive as part of their compensation, or shares they may have otherwise come to own, to cash (possibly for reinvestment elsewhere). And insiders may often have occasion to sell shares for personal reasons.

Some maintain that this latter line of argument is just a rationalization for buying shares while insiders are selling. It is true that insider selling may, indeed, reflect bearish sentiment, but the alternative selling reasons are highly legitimate. If you doubt it, try to imagine your entire income and wealth concentrated in any single business entity, and how uncomfortable you'd feel with a lack of proper diversification.

So we're left with an uneven situation. We understand that insider selling might signify bona fide bearishness, but we can't count on that. We have to look to other factors to build a negative case. Insider buying, on the other hand, might reflect something other than bona fide bullishness, but is so often based on true sentiment that we can productively use buying data as a starting point in a search for investment ideas.

Specific Screening Criteria

Here's how the screen was created:

- **Insider Transactions**

The screen's primary insider buying theme is articulated through two tests: one requires at least three insider purchase transactions, net of sales, and the other requires more than three insider buys (regardless of how many sell transactions there are).

- **Insider Ownership**

We require that the percentage of insider share ownership be no lower than 25 and no higher than 75.

- **Trading liquidity**

We want to assure that the shares are reasonably tradable notwithstanding conspicuous insider ownership. We do this by omitting shares that trade over the counter (as opposed to on an exchange). We also require that the stock's float contain at least two million shares and constitute at least 25 percent of the total number of outstanding shares.

- **Supporting tests**

There are usually many insider purchases. So it will usually be impossible to get a manageable sized list with insider tests alone. This screen therefore includes tests designed to confirm the wisdom of the insider purchases.

- We search for some good measure of business performance by requiring that sales growth rates exceed industry averages over the Trailing Twelve Month (TTM) or three-year periods. In the alternative, a stock can satisfy this screen if TTM sales growth exceeds the three-year rate of sales growth.
- We seek market confirmation of insider purchase decisions by requiring that the stocks' four-week price performance be above the industry average four-week share price performance, or in the alternative, that short interest as a percent of float be less than where it stood a month ago.

Institutional Ownership

Institutional investors tend to be diligent and sophisticated, so their interest in the stocks you are considering is a nice confirmation that you've done your homework properly. But high levels of institutional ownership would mean that you are late getting to the party. This screen uncovers stocks that strike a balance between these considerations.

Rationale for this screen

Imagine you've found a great company. Sales and earnings are growing briskly. The balance sheet is strong. Returns on capital are excellent. The stock seems reasonably valued. Insiders have been buying. But suddenly, the balloon pops. You notice that institutions already own 95 percent of the common, compared to an industry average ownership level of, say, 55 percent. You wonder where the stock can go if the big money has already arrived.

It can be very comforting to follow the institutions. You can argue with their investment philosophies. But it's hard to deny that they are diligent and that they do know what's going on at the companies they examine. If too many institutions own the stock, it's hard for it to rise given a shortage of prospective new buyers.

This screen attempts to strike a good balance between institutional ownership as evidence of endorsement by those who've thoroughly studied the facts and as a source of pent-up demand from prospective new buyers.

Specific Screening Criteria

Here's how the screen was created:

- **Trading Liquidity**
We want institutional ownership to be low now, but we also want it to be rising. That can't happen unless there's enough liquidity to accommodate the needs of these investors. We address that by limiting ourselves to stocks trading on the NYSE, AMEX or NASDAQ, and by requiring that average daily volume be above 20,000 shares.
- **Ownership**
The screen requires that institutions own more than 10 percent of common shares. A stake below that very modest threshold should cause you to wonder why institutions were avoiding the stock. The other test requires institutional percentage ownership of the stock to be less than the industry average percent of institutional ownership.
- **Trends**
We require that net institutional purchases (shares bought minus shares sold) have risen in each of the last two reported quarters. This test, combined with the one just above, finds stocks for which institutional ownership is rising, but hasn't yet reached industry average levels. The screen is also limited to stocks whose prices moved up in the past four weeks. This doesn't prove that institutional purchasing continued strongly during this period, but it

would at least make it less likely that institutions recently switched to a selling mode.

- **Analyst Coverage**

The screen requires that each stock be covered by at least two analysts. This would suggest that increases in institutional ownership is accompanied by access to some fundamental research.

- **Supporting Decisions**

No matter how thoughtfully any screen is constructed, numbers alone can't tell the whole story. So we look for ways to tap into qualitative assessments made by key market participants. **A good way to do that here is to look at whether the behavior of other investors suggest that also have developed favorable assessments of the stock.**

- The screen requires that the shares have been purchased by one or more insiders in the latest six-month period.
- Short interest must have declined in the latest month for which data is available.

Lesser Known Stocks

With so much information so readily available nowadays, it's getting harder to uncover interesting investment ideas that haven't already been discovered by the crowd. But it can still be done.

Rationale for this screen

About half the stocks in the Reuters database have no discernable analyst coverage. For companies trading on the NYSE, the percent is less, but still higher than you might suspect—approximately 25 percent. These aren't precise numbers, since it's possible that some firms may be covered by analysts who don't report their estimates and recommendations to the organizations that collect and report analyst data. But even subject to adjustments like that, we are still left with a large pool of companies that are ignored by Wall Street research departments.

The number of potential "undiscovered gems" increases if we change our definition from zero coverage to modest coverage. Among stocks that have coverage, the average number of analysts per stock is six. But mathematical averages can be distorted by high counts at one extreme or the other. Only one-third of the covered stocks are monitored by more than six analysts.

A stock with little or no research coverage can be a great investment opportunity, or a very poor choice. The latter concern is a serious one. We're living in an age of abundant information. You can legitimately suspect that stocks with little or no analyst coverage may simply be unworthy of attention.

On the other hand, there are a lot of stocks out there—Reuters covers more than 9,000 publicly traded companies, which means that however much effort Wall Street firms put into research, that's still a lot of ground to cover. So if you want to dig a bit harder, you have lots of opportunities to discover winning companies and buy their stock before the crowd catches on.

But high potential reward comes with high risk. Even if you don't agree with a particular analyst's report, you can at least benefit from a factual presentation that can give you a sound basis for developing your own opinion. And as the quality and quantity of coverage increases, so, too do the opportunities of potential future problems. The system isn't perfect (for instance, you need to know that a Hold recommendation may be the functional equivalent of a Sell), but it helps. And "doing without" can be a challenge.

Specific Screening Criteria

Because lesser coverage might signal unfavorable prospects, we can't look for stocks simply by sorting based on the number of analysts. We need to add other tests to help point us toward stocks that don't deserve their neglected status.

We start screening with a definition of uncovered/under-covered stocks.

● Analytical Coverage

The screen requires that the stock be covered by six or fewer analysts, six being the

average level of coverage for all stocks that are monitored by analysts.

- **Institutional Ownership**

We require that institutions own no more than 50 percent of the outstanding float. We then add a requirement that institutional percentage ownership be less than 80 percent of the average level of institutional ownership for stocks in the industry.

Now, we have to add some tests that will hopefully steer us away from stocks that are uncovered or under-covered because they don't deserve wide following. No screen can ever do this perfectly, so in the end, we must always make a case-by-case review before actually investing. What we're really asking the screen to do is help narrow the list to a more manageable number.

- **Corporate Earnings**

Year-to-year EPS comparisons in the latest reported quarter are an important consideration to investors. So we required that that the latest available comparison be positive (in other words, EPS in the last quarter must have been above the EPS reported for the comparable quarter a year earlier). We also screened year-to-year growth rates in the latest reporting period to be above the industry average growth rate.

- **Market Performance**

Next, we added some measures of stock price action. Since we're trying to find stocks that haven't yet been fully appreciated by the crowd, we need to tolerate at least some level of lackluster market performance. But we don't want to accept so much weakness as to suggest that the investment community took a good look at the company and came away unimpressed. Here's how we struck the balance.

- Over the past 52 weeks, the stock's percentage price change should be no worse than zero; in other words, it should not be negative.
- **Of late, the market has been erratic,** so in looking at *recent* share price performance, we need to be flexible. We require only that the percentage price change over the past four weeks be no worse than -10 percent. (Note that as a result of the prior test, the allowable correction must still leave the price higher than it was 52 weeks ago.)
- Trading volume over the most recent 10 market days must average at least 20,000 shares. This keeps the least liquid stocks off the list.
- Finally, we require that net institutional share purchases (shares bought minus shares sold) in the latest quarter reported by institutions be positive (or zero). On the one hand, a focus on stocks that are under-owned and under-researched has at least some contrarian flavor, since it does lead us away from companies getting the most press. But active selling on the part of institutions may suggest too much contrarianism, because such

activity may reflect unfavorable qualitative judgments about the stock's real prospects.