

TAKING THE MYSTERY OUT OF JUDGMENT

Session 1 - JUST WHAT IS "JUDGMENT"?

To us amateur investors, "Judgment" is commonly used to describe what we do in the process of analyzing stocks that goes beyond calculation. It implies subjective decisions we make about a number of things. When doing a stock study manually, there are nine opportunities for judgment. These may be reduced to seven when doing the study on the computer because the process of estimating what the historical growth of a company's revenue and earnings has been in the past is accomplished with mathematical precision where, previously, it was necessary to use a ruler and approximate the result. Each opportunity is a "cause to pause" and think about those things that contribute to your decision.

Right off the bat, this discussion must sound intimidating for those just starting out. So let's go back to the basics and understand just what "Judgment" really is and, more important, how simple it really is.

Don Danko, Better-Investing's longtime editor, described it aptly when he said that "Judgment" is to "understand what's happened in the past and use that understanding to project what will happen in the future." This gets us closer to ascertaining what it is and why it's important.

Probably the best way to take the mystery out of it is to do as most exposes do and break it down into its simple components. Essentially there are but four and a half kinds of judgment. The first four are essential; the remaining "half" is a matter of lore and conventional wisdom that folks just like you have devised over the years to help them make their own judgments. Let's get the "lore and wisdom" out of the way first because this is the thing which contributes the most to the mystery.

LORE AND CONVENTIONAL WISDOM

NAIC investors have devised rules of thumb; various percentages and ratios, and other such guidelines in the course of their investment journeys, just as you will. Some of them are suggested by our venerated gurus like Tom O'Hara, Ken Janke, Ralph Seger and other authorities respected from NAIC's beginnings. Others come from experienced folks like some of the participants on this forum or the I-Club or, perhaps, teachers at national or local events who are not held in such awe as are the early founders, but who as willingly share them with others and who are thought to be authoritative or knowledgeable.

None of these items is essential. Some of these items are simply subjective ways to apply common sense to the task when you come up with your forecasts. They are not mysterious. They are couched in common sense. And they are things that you will pick up along the way as by osmosis. You'll just be mindful of them as you go along.

THE FOUR LEVELS OF JUDGMENT

1. MAKING HISTORY RELEVANT

- a. **Eliminating non-recurring events** — Because "judgment" is making use of what you learn about history to project the future, anything that contributes nothing to projecting the future should be considered irrelevant. Events not likely to recur in the future should be removed from the calculation of historical sales and earnings growth as irrelevant.
- b. **Discounting early growth** — Companies, especially in their early stages, grow very rapidly because the starting point from which growth is measured is low. Such early data should be removed to make the remaining data more relevant for forecasting future growth.
- c. **Eliminating inflated PEs** — High historical multiples are sometimes caused not by extremely high prices but by poor earnings. PE's that are exaggerated should be removed to prevent overestimating future price growth and underestimating Relative Value (Toolkit) or the HVR (Take \$stock).

2. ESTIMATING FUTURE COMPANY PERFORMANCE

- a. **Estimating future revenue and earnings growth** — Based on relevant historical growth, you will estimate future growth and, with that, estimate future earnings.
- b. **Estimating future profit margins, taxes, etc.** — Using the "Preferred Procedure" (Toolkit) or the "Business Model" (Take \$stock), you can also estimate the detailed fundamental items that contribute to formulating the bottom line (earnings per share) from the top line (Sales).

3. ESTIMATING FUTURE PRICE PERFORMANCE

- a. **Estimating future Price-Earnings Ratios** — Using your relevant historical PE's you will formulate an estimate of PEs over the next five years.
- b. **Estimating future high and low prices** — Multiplying your estimates of average high and low PEs with your previous estimates of future high and low earnings, you will estimate the range of high and low prices in the next five years.

4. ACCEPTANCE OR REJECTION

- a. **Progressive decisions to accept results and continue, or to reject the stock.** — One of the better features of our stock study process is the progressive nature of that process. Each step affords you the opportunity to judge whether the result is acceptable or not, and if not, expend no further effort on the study.

There are many such opportunities which we'll discuss in the coming installments.

Session 2 - QUALITY: JUDGMENT IN THE VISUAL ANALYSIS

1. RECENT PERFORMANCE

a. Accept or Reject

Quarterly Growth — The first place one should look following the header is the area that displays the most recent performance.

For the SSG, this would be the quarterly information in the top, left corner of the growth chart. If the present growth is inadequate, a wise novice will reject the study and move on.

A confident advanced investor might look at the PERT-A to see what the trends look like for more than just the last quarter, do some quality research on the Internet to see if there's something afoot that others know about but that isn't obvious. If there's no reason for concern, he or she might continue.

For the Take \$tock user, the recent growth is found both on Screen 4 (the trailing four quarters), and on the front of the TSSW form where there's a record of the past four quarters, the percent changes for each, and for the trailing twelve months — a sort of "mini-PERT-A."

In either case, you can see recent trends and, after appropriate research, make a decision as to whether or not you think it wise to continue.

2. VISUAL ANALYSIS

a. First Impressions

I'm fond of saying, "If you can tell the difference between a straight and a crooked line, and between a line that slopes up and one that slopes down, you've already learned nearly all you need to know about the quality issues." While that's admittedly something of an oversimplification, it's certainly true about Section 1 of the SSG.

Section 1 is called the "Visual Analysis" for good reason. Looking at the lines plotted on the form, first impressions are generally the most important. If the lines slope up from left to right, and if they are reasonably straight, the odds are that you can benefit from going further. If they are not, this is an "Accept or Reject" issue and you might as well discard the stock study.

Poor candidates are usually easier to spot than good ones. And marginal ones may be worth further investigation; but, since we're able to find more good companies out there, why settle for "iffy" ones. When in doubt, throw it out!

b. Eliminate Irrelevant Data (Outliers)

Eliminate non-recurring events — "Spikes," events that are usually displayed as substantial down-turns in sales and often breaks in the earnings line at the bottom of the growth chart, depict events that are serious "potholes in the road." If there are a number of them, you would probably be best off to move on to another stock. If there are only one or two, early in the history of the company — and, if the growth from that point on has been reasonably steady and strong — you may choose to eliminate it (or them) by clicking on the line representing that year (Toolkit) or on the year (Take \$tock: Advanced mode). A good rule of thumb is to never eliminate an outlier if doing so would increase the historical growth rate of either sales or earnings per share.

Discount early rapid growth — Companies early in their life cycles will often emerge from their startup deficits and display explosive growth — each year growing spectacularly from the previous low point. Such growth declines over time, eventually reaching a point where growth is sustainable year to year. This decline is clearly visible on the growth chart as the line depicting sales or earnings growth resembles a trajectory, each year's slope becoming shallower until it stabilizes at a sustainable rate.

The trend line that takes into account all of the available history, in such cases, will appear as an "string" on a "bow," crossing the arc between the early and recent data, and appearing steeply inclined. The rate of growth it describes is considerably greater than recent growth. Therefore, it's important to remove the data that contributes to this overstated growth rate. After all, one would scarcely expect the rapid growth from the past to occur again in the future, as the company's success actually causes the rate to decline. (It's much more difficult for a company with \$500 million in sales to increase those sales 15% than it is for a company when it has only \$5 million in sales.)

If possible, you should delete the earlier years until the rate of historical growth no longer declines. This may even involve deleting all but the last one or two years. In such a case, you still can't rely upon last year's growth to continue into the next year. But that's a topic for our next item.

c. Estimate Sales and Earnings Growth

In estimating future growth, let's consider some general rules:

- ◆ First of all, we'll always begin with sales. They're always the more stable and steady of the statistics, or at least they should be, since earnings per share are affected by a variety of expenses and changes in the number of shares outstanding which makes them less predictable.
- ◆ Secondly, never estimate future sales or earnings growth to be higher than your relevant, historical growth. No matter what kind of story you read or hear, it will be just too much of an exception to the rule. So use the historical rate as your starting point — your maximum.

- ◆ Third, don't estimate any growth above a rate that you believe to be sustainable. Historically, growth above 20% has not been sustainable over the long haul. For the reasons discussed before, earnings growth must parallel sales growth over the long term. Therefore, it's best that you never estimate the long-term future growth of earnings to exceed the growth of sales.
- ◆ Finally, just remember that your interests are best served if you forecast it "right." Forecasts don't have to be accurate; they just need to be "right." Since you'll most often be "right" if you underestimate rather than when you overestimate, the more conservative you are, the more likely you are to be "right." In other words, there'll be fewer unpleasant surprises and more bonuses.

d. Revenue Growth

Now let's look specifically at estimating sales growth.

- ◆ First, start with your relevant historical sales growth.
- ◆ Reduce it slightly, just for normal decay as companies grow. Perhaps down to the next half or a whole percentage point.
- ◆ Next, look to see how stable historical sales have been. If they've been like a railroad track, there's little need to back off, but if they zigzag a little, then, the more unstable they've been, the more you need to reduce the rate for that uncertainty.
- ◆ Then, temper your estimate using your common sense assessment of the sources of growth, likelihood of competition and any other subjective issues that cross your mind.
- ◆ And finally, if your estimate is still above it, reduce it to no more than 20%.

e. Earnings Growth

Estimating the growth of earnings per share is very similar to what will have just completed with your sales estimates. There are, however, a couple of differences.

- ◆ First, of course, as you did with sales, you'll start with your relevant, historical rate.
- ◆ Reduce the growth if it's above sales, to the rate of sales.
- ◆ Next, again as you did with sales, reduce it to reflect your diminished confidence if it has historically been unstable. The more unstable it has been, the lower your estimate.
- ◆ Again, apply your common sense to the subjective consideration. How sustainable are the profit margins, for example? We'll talk later about the so-called preferred

procedure. This is simply another way to arrive at the earnings per share by considering all of the intervening items that affect the company's income, as it makes the trip from the top to the bottom line. If the result of this process comes out to be lower than your estimate so far, then you'll probably want to use that result.

- ◆ And finally, again, if it's above 20%, reduce it.

f. Accept or Reject

- ◆ **Historical growth** — Ideally, you're looking for historical growth that has been able to double the value of revenues or earnings over a five year period. If the historical growth is inadequate for your needs, or is too unstable to offer much confidence in your forecast, you will probably want to reject the stock as a candidate and try another company.
- ◆ **Future growth** - If the forecast growth doesn't come up to your requirements, you should probably quit and try another company.

g. Visual Analysis - Lore and Conventional Wisdom

Here are some words of wisdom from a couple of NAIC gurus that fall under the heading of "lore and wisdom."

Tom O'Hara - "When I start looking at a company and its sales report, I usually first think of the kind of business the company is in because that tends to have an effect on what I may look for or expect from its sales.

"For very high growth rate companies I expect to see some reduction in the rate of growth for the past couple of years. If it hasn't occurred, I build in an expectation for a slow up in my projection."

Ken Janke - "Many times we see that earnings are growing more rapidly than sales Faster growth in E/S is usually because the profit margin has been increasing. It may come to a point where margins cannot increase significantly.

"Another reason for E/S to grow faster is that the company is buying back shares on the market, thus reducing the number of shares outstanding. When the smaller number of shares is divided into the net profit, the results will be higher earnings per share."

I'm leaving for Sacramento today and will be out of pocket until Monday. If I can manage to do so, I'll continue from there. Otherwise, I'll resume on Monday.

Session 3 - JUDGMENT IN EVALUATING MANAGEMENT

1. EVALUATE MANAGEMENT

Although it occupies less space and is less intuitive and "spectacular" than the Visual Analysis, the "Management Report Card" is hardly less important. Section 2 of the SSG, and the "technamental" graphs that display profit margins and ROE in Take \$stock, are the other half of the quality evaluation.

This task is often overlooked by novices because there is nothing, physically, to do. No estimates are required. However, there is an opportunity to eliminate irrelevant data and an extremely important opportunity to make an "accept" or "reject" decision.

2. ELIMINATE NON-RECURRING EVENTS

Both of the management evaluation parameters can be affected by margins and/or ROE values that have been skewed out of the norm as a result of non-recurring events that have occurred in the past. Again, to consider only relevant data is important here; and you should eliminate such extreme data so as not to affect the five-year averages that they have impacted and against which the most current data is compared to indicate a trend.

3. ACCEPT OR REJECT

a. Profit Margins - By far, the most important consideration, for me, are the profit margins. Let me explain:

- ◆ Expenses are paid out of revenues, as a rule. In fact, any company that has to dip into its equity to do so is likely in trouble. Pre-tax profit margins, the number of cents the company gets to keep out of every dollar of revenue, represents a measure of management's efficiency — its ability to control expenses.
- ◆ While there are some exceptions, a decline in profit margins is an indication of management's failure to control their costs effectively. We'll talk about those exceptions in a moment.
- ◆ Companies that are in equilibrium, operating at peak efficiency, display a steady and reasonably constant trend, and are usually found to be leaders in their industry.
- ◆ Companies that have recognized that they can improve their margins and have taken steps to do so, will display an up-trend in their margins. Either of these conditions is acceptable.
- ◆ A down-trend is usually unacceptable and cause to reject a stock without going any further.

- ◆ There are some exceptions — cases where management has made conscious but reasonable decisions that have resulted in a decline. These include taking on new product lines that have smaller margins and sell in higher volume; acquiring a company whose product line has a lower margin; reducing prices to "buy" market share or fight competition, to name a few. Common sense should tell you what to look for when doing your research. If, however, you can't find a good excuse, throw it out!
- b. Return on Equity** - While ROE is given "equal time," it's by no means as clear an indicator of management's performance as are the profit margins.
 - ◆ In the first place, equity — as we indicated before — is traditionally used to implement management's long-term decisions and not those of immediate consequence. Buying a company jet, buying property to build a new headquarters building, replacing obsolete machinery, acquiring another company—all are typical uses of a company's equity.
 - ◆ The consequence of those kinds of decisions are not known until much after the expenditure of the capital; and the wisdom of those decisions can't be ascertained until then. The results, rather than showing up with any significance in the ROE, will LATER show up in the profit margins.
 - ◆ Therefore, if there is a downtrend in the profit margins because the decision was unwise, the trend in the margins will already be evident, and it is that trend that affects the trend in the ROE.
 - ◆ Secondly, calculated using ending equity (EPS divided by Book Value per Share) distorts and artificially reduces ROE values, in the SSG. (Take \$stock uses beginning equity so as not to suffer that distortion.) Even a transaction like buying back shares or paying dividends will reduce the Book Value, elevate or retain the EPS, and cause an increase in ROE that is deceptive.
 - ◆ Our suggestion is to pay little attention to ROE for these reasons. If you're going to calculate Implied Growth (Sustainable Growth), using ROE, as an indication of the potential growth of a company, be sure to use ROE calculated using beginning equity to do so. The formula is $ROE \times RR$ (Retention Ratio - the complement of Dividend Payout), and is not really valid unless you do. The higher the earnings growth, the greater the distortion caused by using ending equity.

The proverbial "Barbed Wire Fence"

The Visual Analysis and "Management Report Card" comprise the quality assessment of a company. Nothing else is required!

There are many metrics and ratios that the pros use. And there are some within our ranks that swear by evaluating financial and operational vulnerability using many of those tools. They are interesting, perhaps fun, incrementally enlightening, and absolutely unnecessary!

What separates the "technamental" — NAIC — investor from the rest of the folks that insist on complicating fundamental analysis is that we have learned what's essential and what's not.

No CEO worth his salt micromanages his subordinates. Neither is there any reason for you to believe you must. In fact, you have more companies to monitor than the typical CEO. The many metrics are merely tools that management uses to achieve the results we judge. And, we need only to look at those results to draw our conclusions.

We can't hire, train, or fire the managements that use those tools; nor do we have access to the data to which they are privy to — neither, I might add, do the professionals.

Management is highly motivated, better equipped, and has far more time than you do to begin to second-guess their decisions. So — as the serenity prayer so cogently suggests — "grant me the courage to accept the things I cannot change...and the wisdom to know the difference."

At this point, you are ready to make a critical judgment. Is the quality of this company, based on the results you've analyzed, good enough to go further? Is the growth sufficiently strong and steady? Is management exhibiting an ability to sustain that quality of growth?

At this point in your study, you have before you a figurative barbed wire fence looming between the Management Evaluation and the next sections in which you will assess the Value — the reasonableness of the price. You must not attempt to scale that fence if there's any doubt about the quality issues. Why is that?

The worse a company performs (fundamentals, not price), the better a value it will appear to be. Because people sell rather than buy the stock of a company that's perceived to be performing poorly, the price will be low, the PE will be low. For those reasons, the risk will appear much less than the reward, the return will label the stock a "bargain" at the price, and you can be seduced into thinking it's a bargain when it's far from it.

Only when you're absolutely satisfied that the company's quality indicators are solidly positive should you move to the other side of the "fence." If you do otherwise, it's like cheating at solitaire.

Session 4 - VALUE: JUDGMENT IN ANALYZING HISTORY

Here again is a section often overlooked because there's nothing physical that you must enter — no estimates to make. Yet the opportunity to make one of the most critical judgments of the SSG is in Section 3 and in the Historical PE section of Take \$tock.

1. ELIMINATE INFLATED P/E'S

As in Section 1, history is laid out for us in this section. Only here, we aren't looking at growth; we're analyzing historical PEs.

If you were to analyze the gasoline market, you'd want to look at history and determine what the average price was for a gallon of gas. You could then both analyze the current price of gas in view of that information, and you could come up with a pretty good idea of what price you might expect a gallon to bring in the future.

This is pretty easy to grasp, I'm sure; and it should therefore make a lot of sense when we say that we're doing the same thing with a dollar's worth of earnings. The PE is the price paid for one dollar's worth of earnings. That price fluctuates up and down like the gas prices do — only the PEs are more volatile than the gasoline! Because it's normal for the stock's price to fluctuate as much as 50% above or below the average within a year, it's common for the PEs to fluctuate nearly as widely.

To evaluate a stock's price, we will want to analyze the current PE as it compares with the historical average; and, in the next session, we'll discuss applying that analysis to estimating the price of a dollar of earnings in the future. Before we can apply these historical values, however, we need to again make sure they're relevant.

Consider this: Stock prices are captured during the company's fiscal year — and the prices reflect the highest and the lowest prices from the first to the last day of that year. PEs are calculated by dividing the stock price by the earnings per share.

However, if we assume that the earnings are what drive the price, and we assume that investors are paying so much for that dollar's worth of earnings, doesn't it fly in the face of common sense that those that paid the price they did, up to and on the last day of that year, couldn't know what those earnings for the year were until — typically — more than three months later? That's right. The company can't report its earnings until after the last day the prices are recorded, and usually a company will use up the entire time allowed (90 days from the close of the annual books) before they report their financials to the SEC.

This means, of course, that the actual earnings for the year couldn't possibly influence the price even though both the price and the EPS are used in the equation.

The fact is that it is the expectation of earnings that drives the price; and sometimes, because of accounting decisions, the earnings reported don't even resemble the forecasts on the basis of which investors bought. When this happens, especially when the EPS are much lower than expected — and this can happen in more than one year — a PE or PEs will be exceptionally high.

If that (or those) remain in the calculation of the Average High and Average Low PEs, then the resulting values will be enormously distorted — the high PE being extraordinarily high.

We are supposed to use history to help us estimate the future. Right? If we allow this distortion to remain, and if we use this extraordinarily high PE to influence our assessment of our future high price, that critical high price will be much too high. And, our measurements of value—our total return and risk assessments will appear deceptively favorable. This inappropriate assessment can result just because the company had a bad year!

You therefore must scan the values of the historical PEs to see if any of the values displayed are out of line — especially if they are extra high. If there are anomalous PEs, you must eliminate them. They are not relevant. They distort what we need to learn from history. And they can cause a dangerous overstatement of the potential for the stock you are studying. Eliminating those outliers will eliminate the overstated data from the calculation of the Average High and Average Low PE and give you a more suitable picture of the potential future PEs.

2. LORE AND CONVENTIONAL WISDOM

Here's Ralph Seger's comment about this item: "Look at the historical record. Are there some values that common sense says to disregard? Frequently, when EPS drop below trend levels for one year, the price does not drop in proportion. That results in a P/E ratio for that year that is not representative of a normal situation. . . .

"If the historical high P/E ratios seem to discount not only the future, but the hereafter, it is prudent to lower them to a reasonable level. . . . When future expectations are cooled by some realistic expectation, then P/E ratios become more rational."

Session 5 - JUDGMENT IN APPLYING ESTIMATES

This is the area where the "rubber meets the road" in assessing the price of a stock. There are a number of opportunities for judgment here; but the basics are simply the estimates of the future high and low PEs and the selection of a low price. You may also choose to alter the assessment of the estimated future earnings (using the "Preferred Procedure" for the SSG, "Business Model" for Take \$tock), and you may decide to use the sum of the EPS for the most recent four quarters in lieu of last fiscal year's earnings.

1. ESTIMATING HIGH AND LOW PEs

The most important understanding for Sections 4A and 4B in the SSG and Future PEs in Take \$tock is that you have viewed historical PEs to learn what's happened in the past, perhaps eliminating some irrelevant data; and you are now going to use that relevant history to help you view the future. This is a separate and distinct decision from anything you did prior to this judgment opportunity.

History has given you a maximum as a starting point; you will now temper that maximum, in the case of both the low and the high PEs, to come up with a conservative forecast for the future. The consequence of overestimating these values can be disappointing at best, dangerous at worst.

While you may very well elect to use the Average High PE and/or your Average Low PE as your estimate for the future high and low PE, this should be a conscious decision, not just an automatic one. And you should take care to be sufficiently conservative to satisfy yourself that they are reasonable and sustainable.

You may wish to eliminate additional data from the prior section to help you come up with lower or more conservative values; but be sure to replace those that you eliminate for that purpose. Only irrelevant data should be eliminated for the calculation of Relative Value (covered later).

The High PE is the most critical, in that it is multiplied by your estimated future earnings to come up with the highest price you can reasonably expect the stock to rise to between today and five years from the end of the last full fiscal year. This high price is used to estimate your return.

Unless you have a very good reason to believe that investors will consistently pay more than thirty times earnings in the future—and this is unlikely—don't accept a figure for your high PE in excess of thirty.

For the Low PE, the same caveats apply about being conservative. This value is used, multiplied by the low earnings figure, to calculate a future low price. And it's that value that affects your determination of risk. Of course, you can't set thirty as your cap for the low PE. If you have had to lower your high PE to thirty, it might be best to lower your low PE proportionately.

My own mechanical method of selecting a High and Low PE is to use the average of the lowest half or majority of the high and low PEs over the past ten years rather than five. This will tend to eradicate as irrelevant all of the extraordinarily high PEs that were prevalent during the recent "bubble." I will first use those figures (which are available in the Toolkit using the [Alt+X] option with the PE Estimate dialog box is open.) It is used automatically in Take \$stock.

2. HIGH EARNINGS: THE "PREFERRED PROCEDURE" OR "BUSINESS MODEL"

As a part of the Visual Analysis, you earlier estimated the future growth rate of sales and earnings and projected that growth to derive a figure for both sales and earnings approximately five years out. It is that future earnings per share figure that is used in conjunction with your estimate of the future high PE to calculate a forecast high price. There is yet another way to approach the estimate of future earnings. This is the "Preferred Procedure" (SSG) or "Business Model" (Take \$stock). Using this method is like getting a second opinion — another way to estimate future earnings to corroborate the first result.

In a nutshell, this method starts with the sales figure you previously projected. The benefit of this is that, because sales are inevitably more stable and predictable (since they are not affected by expenses or the number of shares outstanding), they're more likely to be "accurate."

The procedure then proceeds to deduct expenses (based upon your historical pre-tax profit margins), your taxes (based on last year's tax), any preferred dividends or other adjustments, and it finally divides the result by the estimated shares outstanding to calculate the earnings per share.

This is exactly the way a company operates, tracing the progress of the "top line" down through the income statement until it becomes EPS, the "bottom line." And, in this procedure, you have the opportunity to make educated changes in these values to alter the result.

When you finish, you will probably see results much the same as the earlier figures; but they will occasionally be different. I suggest you accept the lower of the two in order to be most conservative.

3. SELECTING A LOW PRICE

Selecting the Low Price is the last judgment you will have to apply before reviewing the results and making your decision to accept or reject the stock.

You have already calculated a low price, having done so by multiplying the lowest number of times earnings investors might pay (the forecast Low PE) times the lowest earnings you might envision the company producing — your choice of the last fiscal year's earnings or the sum of the most recent four quarters' earnings. How much more conservative can you get with a reasonable growth company than to use the most recent actual earnings as your projection five years out?

The fact is, if earnings per share don't exceed that figure within a very short time, you're not going to keep the stock anyway.

In any event, that estimate of the future low price is a reasonably pessimistic one. The SSG offers several other options, only one of which makes much sense to me — and that only under some conditions. Take \$stock offers only two. The ones that I don't bother with are the average low of the last five years and the recent severe market low. Both of those are variations that one might use if analyzing cyclical stocks, value opportunities, or turnarounds — stocks in whose past disaster was commonplace and in whose future it's just as apt to be. I simply don't want to bother studying those kinds of companies if I can help it. And I can.

The SSG's "Price the Dividend Will Support" is an interesting option. I will use it only under two conditions that must occur at the same time. If the percent dividend payout is in the neighborhood of 35% or higher, and if the value of the Price the Dividend Will Support is higher than the Forecast Low Price, I might be tempted to use it.

What it is supposed to signify is that the stock price is low enough to make the dividend yield competitive with other income investments and people will start buying the stock for its income in addition to its potential appreciation.

Ninety nine percent of the time, I'll use the forecast low price and will never adjust the low price lower to "fix" the Upside Downside Ratio (which we'll discuss in the next session).

In Take \$tock, the "Yield-supported Low Price" is somewhat different than in the SSG. It is based upon a comparison of the dividend yield with the yield on a 5-year Treasury Note and will favor that option when the dividend yield comes within 1 percent of the treasury yield.

4. LORE AND WISDOM

There are a few "crutches" that NAIC gurus suggest which I'll add here.

Tom O'Hara – : "In an advancing market, the low will be moving up as fast as the high price. In that kind of market, I like to test a price 25 to 30% below the recent high just to see how it compares with other choices. That isn't going to do you much good whenever we get the big drop because that will likely be 50%."

Here's another:

Ken Janke: - " One of the approaches I like to use [to estimate a low price] is to multiply the latest 12 months' E/S by the lowest P/E of the last five years. If that lowest P/E happens to be in the most recent year, I may reduce the price by another 10% just to be on the conservative side. Remember that the stock market has experienced a 10% decline 50 times since the turn of the century, so it can happen any time." [Note: that was last century!]

This completes the discussion of the decisions you must make in preparing the stock study for your final judgment. We'll talk about analyzing the results in the next session, our last.

Session 6 - JUDGMENT IN ANALYZING RESULTS

You've now applied judgment in all of the essential opportunities that have presented themselves in your stock study. It remains only to make the final judgment: to buy or not to buy. There are but three items that you will look at before making that decision: Return; Risk; and Relative Value (SSG) or Historical Value Ratio (Take \$tock).

1. RETURN

The most important criterion should be the hypothetical return you might expect to get on your investment. After all, that's what you're in this for, isn't it.

You will find several places in Section 5 of the SSG where you will find return calculated. It's important to understand each so you won't be confused by them.

Average Annual Return (Section 5C) - SSG only. This is a calculation of the simple return on your original investment.

It's based on five years of growth and dividend contribution combined, measures the total percent increase in value, and divides by the number of years — five in this case. It is not compounded growth and can be misleading if the user is not aware of the fact that it is simple growth. To double your money in five years, you would of course require 20 percent growth of the initial amount each year.

- a. **Total Return — SSG and Take \$stock.** This is the compounded rate of return over the period covered. It is calculated by combining the dividend yield with appreciation which is calculated from the date of the study to the date the stock is expected to achieve its high price — that high price being a function of the forecast high PE, as described above. It would take just under 15 percent each year to double your money in five because the compounded return takes into account the hypothetical growth in value each year, which the simple calculation doesn't.
- b. **Projected Average Return - Toolkit and Take \$stock.** This is the same calculation as Total Return; but the high price is calculated using the forecast Average PE instead of the forecast High PE. This tells you what kind of total return you could expect to get if you sold the stock in about five years at its average rather than high PE. This is, obviously, a more conservative value.

Your aim is to find stocks to populate your portfolio that will contribute to a portfolio return that averages around 15%. This does not at all mean that every stock in your portfolio must expect that return. It simply means that the combined return should do it. When deciding whether or not to buy, you should take into account the other stocks in your portfolio, the risk entailed in higher return stocks compared with the more mature, stable, and lower-return stocks. And you should judge accordingly. A good return that meets your specific needs is what you are looking for.

2. RISK

While the return is the most important item, it's possible to be exposed to too much risk in order to get it. This is the next item you should evaluate. Risk, for our purposes, is a comparison of what you have to gain (if the stock goes all the way up to your forecast high price) with what you might stand to lose (should it decline to your forecast low price).

The SSG makes use of the Upside/Downside ratio to provide you with a measure of the risk. This is calculated by dividing what you stand to gain (the "distance" between the current price and your forecast high price) by what you have to lose (the "distance" between the current price and your forecast low price). As the current price gets lower, the top of the equation becomes greater and the denominator becomes smaller. As you can imagine, when the current price declines to your forecast low price, there is apparently no risk. In fact the Upside/Downside ratio becomes infinite.

You will look for an Upside/Downside ratio of 3 to 1 as the ideal; i.e., there is three times the reward as there is risk. You should be reluctant to buy the stock unless the reward is at least three times the risk.

Take \$stock takes a little different approach to the same issue. Using a "Risk Index," it measures the distance between the current price and the low price against the total distance from the low to the high prices. This percent of risk, or "Risk Index" is expressed as a percentage and, when it represents 25 percent of that total distance, is the equivalent of the 3 to 1 Upside Downside ratio. (Obviously, if 25 percent is risk, 75 percent would be reward — 3 to 1).

The benefit to this is the fact that, as the current price rises or falls, the index grows or declines linearly instead of asymptotically or at a faster and faster ratio. This is because we hold the denominator in the equation steady. In any case, if you're happy with the return, all is probably well if your risk, however it's measured, is reasonable.

If, however, the Upside/Downside ratio is too low (or the Risk Index too high), then the odds are that the stock is simply too expensive at the moment to give you a good return with reasonable risk. You should put the stock on your watch list and wait until the price declines.

On the other hand, if the Upside/Downside ratio is too high (the Risk Index too low), it could well be an indication that there may be something wrong with the quality issues. Its significance is that the stock is currently selling at a price well below that at which you've valued it and there may be some reason that you don't know about but others do.

This is merely a warning signal and should be heeded. But, it's also — at least to me — a signal that tells me that the stock may be undervalued and I might be able to get it at a bargain price. If research reveals nothing that would make me feel that my valuation is too optimistic, I'll consider — as is implied — there's little risk at that price.

There is, however, another thing you might consider.

3. RELATIVE VALUE (RV)/HISTORICAL VALUE RATIO (HVR)

To put this device into perspective, it's important to realize that these metrics are nothing more than a measure of what other investors think of the stock at the moment. A corollary to that is that other investors are often wrong!

Relative Value is calculated by dividing the current PE by the relevant, historical five-year average PE. The HVR is similar; but is calculated by dividing the current PE by the relevant, historical ten-year average.

In a nutshell, this value, expressed as a percentage, is a measure of how the current price (expressed as a multiple of earnings) compares with the average price (expressed the same).

One would expect that a stock, reasonably valued, would sell at roughly the same PE over its life — perhaps with a little decline due to the normal decline in earnings growth.

When a stock is overvalued, it will sell at a higher PE — a higher "rate" per dollar's worth of earnings — than when it's fairly valued by investors. Of course, when it's "cold" or undervalued, it will sell at a lower "rate" than usual.

These metrics tell you some valuable things; but they should not be used to arbitrarily lead you to a decision to buy or not to buy.

If the value is high (we use higher than 110%) it's obviously valued at a higher price than it has usually been. The first thing you can deduce from this is that other investors have not found any quality issues that disturb them. They think it's a good quality stock too!

It also tells you that they think it's worth more than it has been historically. Don't simply refuse to buy it because this value is high! Look at your assessment of return and risk. If those should indicate that it's a good candidate for purchase in spite of the RV or HVR, don't worry about the valuation. It's probably worth the extra price.

On the other hand, if the RV or HVR is low, don't just discard it because it's arbitrarily out of range — unless you're new and lack confidence that you can do adequate research to prove to yourself that it's a good quality company and the rest of the world's wrong.

A low value certainly tells you that investors are selling and not buying. They may know something you don't know that has led them to do so; and you must find out what that is, if anything. However, if you can satisfy yourself that there's nothing wrong with the quality issues — and the rest of your study indicates that it's okay — you can now be an "educated contrarian" and go against the crowd because you know more than they do!

I think this about does it. I've blurted out about all I can think of about basic "Judgment." I hope I've been able to take away some of the myths and mysteries that have made it so intimidating and bring it back down to earth for you.

There is, of course, a world of lore and wisdom out there. Every instructor has his or her pet rules of thumb and methods of doing this. Just remember, the basics are all you need to know. The rest you can find out for yourself.

Ellis Traub