## The Research Zone

# A One-Page Quick Analysis of a Stock An Aid to the Stock Selection Guide 


#### Abstract

Regular readers of $B I$ are all quite familiar with the Stock Selection Guide (SSG) developed by NAIC. These prudent investors know that the SSG is a fundamental tool and its use is critical in the selection of a stock to buy, or in the decision to continue holding and, in some cases, to sell. A proper SSG analysis (particularly the manual SSG) requires significant time commitment since it involves plotting of vari-


#### Abstract

ous sales and earnings data, figuring out growth rates, calculations of P/Es, future price forecasting, and calculation of upsidedownside potentials. Even with the use of SSG computer software, we still need to input various numbers and determine what appropriate values to use for different calculations. But . . . how do we decide which stock(s) should be considered for such a detailed SSG analysis?


by Kaush Meisheri, Ph.D. Kalamazoo, Mich.

As long-term investors, we are always in search of good stocks that could be worthy of investment. If we keep our eyes and ears open for business magazine articles, business television shows and Internet (not to mention friendly tips through brokers, family members and co-workers), it is not unusual to have a half-dozen company names in any given month that could be potential investment choices for investment club or individual portfolio considerations.

To do detailed SSG analysis on this many companies is rather impractical, but without such an analysis we really can't tell if a company is worthy of investment. Thus, it would be desirable if we could have a preliminary but still reliable way of quickly analyzing a stock to determine if it deserves serious analysis.

With this in mind, this article presents a one-page Quick Analysis which might be considered as "Pre-SSG" analysis. The sole purpose of this quick analysis is to identify excellent companies worthy of SSG analysis, and the ones that are more likely to "pass" the SSG analysis.
(Editor's Note: Mr. Meisheri's Quick Analysis differs from one of NAIC's classic stock study forms, the Stock Check List, in that the Stock Check List serves more as a training tool or "training wheels" for doing the more detailed SSG study. The Quick Analysis simply presents a set of "yes/no" questions that can be answered in just a few minutes to help an investor decide whether or not the company might be worth analyzing on an SSG.)

I had the following guidelines in mind
while developing this analysis: 1) As the name suggests, it should be quick. With some practice, this one-page analysis should take no more than five minutes to complete. 2) The Value Line sheets provide all the answers; and 3) Visual analysis with no (or minimal) calculations should be sufficient.

The Quick Analysis, by definition, is focused on a qualitative appraisal of a stock worthy of investment, with the idea that a quantitative analysis would follow by using the SSG. In short, no calculators, no rulers, no colored pencils and no computers! I imagined this as a sheet someone could take to the public library and while going through the current Value Line, use to select companies of further interest.

The Quick Analysis is developed as a series of questions that can be answered in a "yes" or "no" fashion, with all answers derived from the Value Line report. In the following section, I will first present the Quick Analysis questionnaire along with rationale behind each question. I will also present an actual stock analysis using this method and in the process, demonstrate where to look in Value Line for answers to these questions.

## Quick 'Pre-SSG' Analysis

The questions that form the Quick Analysis are presented in Table 1 (see page 61). The questionnaire is designed to address four basic attributes of a stock worthy of serious investment consideration:

Continued on next page

## DIVERSIFY INTO REAL ESTATE STOCKS

## Introducing the T. Rowe Price Real Estate Fund.

Our newest stock fund offers a convenient way to participate in the potential rewards of the real estate industry. The fund seeks long-term capital growth by investing primarily in companies involved in real estate and related services, including Real Estate Investment Trusts (REITs), operating companies, developers, management firms, and mortgage lenders.
Appreciation and income. As the chart shows, real estate stocks have rewarded investors well over the long term. In pursuit of capital growth, our investment managers target stocks that offer strong appreciation potential. Many of these stocks, particularly REITs, typically generate a high level of income. This income component not only enhances return potential but can also help cushion your portfolio in times of market fluctuation.
 And, since real estate stocks tend to move independently of broader markets, this fund can help reduce the overall volatility of your investments.
Of course, since the fund focuses on a specific segment of the economy, it should be used to complement rather than anchor your investment portfolio. The fund's share price would be negatively impacted by unfavorable trends affecting the real estate industry, including changes in tax laws and rising interest rates. The minimum investment is $\$ 2,500$ ( $\$ 1,000$ for IRAs). $100 \%$ no load.


Call 24 hours for your free investment kit including a prospectus 1-800-541-6155 www:trowepric.com

[^0] T.Roweltice

Quick Analysis continued from page 59
I. Is the company profitable and productive, showing consistent records? (Questions 1-6)
II. Is the management's handling of business and finances superior? (Questions 7-14)
III. Is the company's future growth rate attractive? (Question 14)
IV. Is the stock selling at a price that might be in the buy range? (Question 15)

I have selected the medical device company, Medtronic, Inc. (MDT) for the purposes of quick analysis and discussion. A modified copy of the Sept. 12, 1997 Value Line report on Medtronic is presented in Table 2 (see page 64). In order to demonstrate to the reader where to look for the answers to the Table 1 questions, I have shown corresponding numbers on the Value Line report in Table 2. Finally, Table 3 (bottom of page 64) shows a copy of the completed Quick Analysis of Medtronic. A detailed discussion of questions follows:

## Question 1

Have sales increased continuously for five years? The first question in Table 1 addresses the productivity record of a company. Does the company sell products that consumers want to buy? In the Value Line report for Medtronic, I have marked where to look for Sales information (marked as \#1 and 2 in Table 2). In the first question, we are looking at the most recent five-year history since in most cases, a five-year period can represent a reasonable business and economic cycle.

If a company has managed, for five years in a row, to increase its sales each year over the previous year, this would be the first indication that the company has worthwhile products and has managed to remain productive. In the case of Medtronic (Table 2), we begin to look backwards at sales figures starting with 1996 (the most recent year completed) and go back till 1992 and see that the company has indeed managed to increase its annual sales each of these past five years.

## TABLE 1: ONE PAGE QUICK ANALYSIS OF A STOCK

An Aid to the Stock Selection Guide (SSG)
COMPANY NAME: $\qquad$ Date of Analysis:

| \# | QUESTIONS | YES | NO |
| :---: | :---: | :---: | :---: |
| 1 | Have Sales increased continuously for 5 years? |  |  |
| 2 | Have Sales doubled in 5-7 years? |  |  |
| 3 | Have Earnings Per Share increased continuously for 5 years? |  |  |
| 4 | Have Earnings Per Share doubled in 5 years? |  |  |
| 5 | Any Dividend paid during the past 5 years? |  |  |
| 6 | Has Dividend Per Share increased continuously for 5 years? |  |  |
| 7 | Is current Operating Margin (OM) $\geq 15 \%$ ? |  |  |
| 8 | Over the past 3 years, is $\mathbf{O M}$ stable/increasing ? |  |  |
| 9 | Is current Return on Equity (ROE) $\geq 15 \%$ ? |  |  |
| 10 | Over the past 3 years, is ROE stable/increasing? |  |  |
| 11 | Is current Long Term Debt less than 1/3 of Net Worth? |  |  |
| 12 | Are Current Assets twice the Current Liabilities? |  |  |
| 13 | Does Cash plus Receivables equal or exceed Current Liabilities? |  |  |
| 14 | Is Projected Growth in EPS and Dividends at 15\%? |  |  |
| 15 | Is Current P/E in the range of past 5 years Ave. P/Es? |  |  |
| 16 | SUMMARY: Is the Stock Worthy of SSG Analysis? |  |  | mat and has been left blank so that interested readers could make copies for their use. Tables 2 and 3 on page 64 show where information can be found in Value Line to complete the form, as well as a sample of a completed form on Medtronic (see story).

## One-Page Quick Analysis continued

At this point, we may not even know what these products are, but we know that many customers want them! Thus, the answer to question \#1 is "yes," which we note in Table 3. As an optional exercise, we continue to look further back and note that Medtronic has actually managed to increase its sales continuously at least for the past nine years, which would suggest superior performance, and we note this in Table 3 (I say "at least" because Value Line provides Sales data only for the past ten years. If we were interested in going back further, we could look at the sales per share numbers which are given in the first row in Value Line).

## Question 2

Have sales doubled in five to seven years? The second question gives us a quick idea of the rate of sales growth. A basic characteristic I look for in a growth stock is growth at a rate of 15 percent per year, meaning that the company would have doubled its sales in the past five-year period (this would be somewhat less than 15 percent, but close enough). For large companies (annual sales of about $\$ 4$ billion or more), a sales growth rate of roughly 10 percent (meaning doubling of sales in seven years) would still be respectable. Thus, we are looking for companies that have at least doubled their sales in the five to seven-year period.

In the case of Medtronic, we see in Table 2 (\#1 and 2) that the 1996 sales figure is $\$ 2,438.2$ million. We take this as roughly $\$ 2.4$ billion and we look back to see when the sales were $\$ 1.2$ billion (half of $\$ 2.4$ billion), and we see that in 1991 the sales figure was 1,176.9 million, which is roughly $\$ 1.2$ billion. So Medtronic has indeed doubled its sales in the past five years. This positive answer we note in Table 3 for question 2.
(Helpful Hint: For compound growth rates, it is helpful to remember that tripling in five years would roughly represent a compound growth rate of 25 percent a year; doubling in five years equals about 15 percent; tripling in seven years equals about 17 percent; and doubling in seven years equals about 11 percent.) We note in Table 3, the 15 percent compound growth rate for Medtronic's sales.

## Question 3

Have earnings per share increased continuously for five years? This question addresses the profitability record of the company. Has the company managed to be continuously profitable? Again, we are looking for companies that have uninterrupted increases in Earnings Per Share (EPS) in the past five years. In the case of MDT, we see that the EPS (see \#3 and 4 in Table 2) has indeed increased continuously for the past five years. As an optional exercise, we go further back and see that Medtronic has increased its EPS continuously for the past 12 years, which should impress us! We note this in Table 3.

## Question 4

Have earnings per share (EPS) doubled in five years? This question addresses the rate of earnings growth. We are looking for a company that has at least doubled its EPS in the past five years, indicating a minimum of about a 15 percent annual growth rate of profits. For Question 4, we see in Table 2 that Medtronic has roughly doubled its EPS in the past three years, which is also impressive. We note the growth rate of 25 percent in Table 3 for Medtronic's earnings.

Hint: If the answers to the first four questions are all clearly negative, we could stop the analysis since it is quite unlikely that the company is worthy of further consideration based on the fundamentals. Uninterrupted growth in sales as well as earnings at respectable rates are the cornerstone of solid investment selections, and a true-blue fundamental investor should be very reluctant to compromise in these criteria.
> "A basic characteristic I look for in a growth stock is growth at a rate of 15 percent per year, meaning that the company would have doubled its sales in the past five-year period."

Finally, it should be noted that the companies with less than five years of documented history of sales and earnings would not be included in such an analysis. In fact, the SSG analysis encourages us to plot the past 10 years sales and earnings data to help project future growth. We may find high growth companies with less than five years of history that have shown their sales and earnings double (or even triple) in less than a five-year period. However, such companies would carry more risk since they have no proven track record during a variety of different conditions that are experienced during a normal business and economic cycle.

## Questions 5 and 6

History of dividend payment. These two questions should be considered optional. A lack of dividend payment in a solid growth company is not necessarily negative (example, Microsoft). However, a small dividend payment that continues to increase in a solid growth company should be considered a definite positive (example, Intel). In the case of Medtronic (Table 2, \#5 and 6), the company has been paying a dividend for at least the past 15 years, and the dividend has continuously increased for the past eight years. These positive answers are noted in Table 3. As a further optional exercise, we could also determine the rate of growth of dividend payments. In the case of Medtronic, the dividend payment has tripled in the past five years, increasing from \$0.06 in 1991 to \$0.19 in 1996. This would represent a compounded growth rate of 25 percent which we note in Table 3.

## Questions 7 and 8

Operating margin (OM). These two questions deal with the management's ability to extract profits from the sales of company's products (i.e., management's ability to operate the busi-

Continued on next page

## One-Page Quick Analysis continued

ness). Operating income is a pre-tax number and represents the difference between income from goods sold and the cost of making and selling the goods. (Editor's Note: Operating income is not the same as the pre-tax profit used in SSG analysis, but for most companies it represents the vast majority of total pre-tax profits.) The operating margin (OM) are these pre-tax profits expressed as percent of sales. The Value Line report provides Operating Margin as shown in Table 2 (\#7 and 8).

I would consider a 15 percent $O M$ as a respectable target, and a consistent OM of 20 percent over the past three years as superior. Of course, the higher a company's OM is, compared to its industry competitors, the better. In contrast, if OM has declined three to five percent over the past three years, that should constitute a "yellow flag" for a company, especially when combined with stagnant or eroding sales. Some of the highly successful industry leaders boast eye-popping OMs in the $25-50$ percent range, including companies such as CocaCola, Merck, Microsoft, Intel and Cisco, to name a few. We see that Medtronic also boasts an excellent current OM of 39 percent, and that it has been increasing over the past three years (Table 2, \#7 and 8). Again, both of these answers are very positive for the company's management (and an indication that Section $2 A$ of the SSG might also present quite a positive picture.)

TABLE 2: MEDTRONIC VALUE LINE REPORT (modified)


Copyright 1997 by Value Line Publishing, Inc. Printed with permission. References to the accompanying article have been added by BI.

## Questions 9 and 10

Return on equity (ROE). These two questions deal with the management's ability to enhance return on company's investments, and represents how well the management can fuel company's internal growth using shareholders' money. Value Line reports provide Return on Equity (ROE) as \% Earned Net Worth (see Table 2, \#9 and 10). (Similar to Section 2B of the SSG) I consider a stable ROE of 15 percent as respectable and 20 as superior. Some of the highly successful industry leaders that boast tremendous ROEs ( 30 percent or better) include CocaCola, Merck, Gillette, Philip Morris, Microsoft, Intel and Cisco. For Meditronic, we see (\#9 \& 10 in Table 2), that the current ROE is 28 percent, and that it has remained over 22 percent for the past three years. A high, stable ROE coupled with a high, stable OM speaks volumes for this company's management.

## Questions 11, 12 and 13

Long term debt and day-to-day financing. These three ques-

## One-Page Quick Analysis continued

tions deal with the management's ability to handle long-term as well as day-to-day finances. Long term debt can be helpful in financing growing businesses. However, too high a debt can be a burden in times of a weak, inflationary economy since high interest payments on the debt could prove to be a drain on earnings. I offer this analogy: long term debt is like the extra weight carried around by a marathon runner. When the runner is in good shape and full of energy, she doesn't feel the weight at all. But towards the end of the race when she is drained of energy, this extra weight can feel deadly.

As a norm, I don't think long term debt should exceed onethird of the net worth of the company. (Editor's Note: Some investors expand that to one-third of total capitalization, i.e. net worth plus long term debt.) Some huge companies are prospering without carrying much or any long term debt (examples, Microsoft, Intel, Merck). In the case of Medtronic (Table 2, \#11), we see that compared to its net worth of $\$ 1.7$ billion (1996), its long term debt of $\$ 14$ million is negligible (less than 1 percent).

Next, the levels of current assets and cash should be such that day-to-day financial obligations can be met without undue stress. Here are two basic norms for analyzing this.

1. To have current assets that are twice the current liabilities (this is also called Current Ratio). We can ascertain this in two different ways from Value Line. First, we see directly in Table 2 (\#12), that Medtronic's current assets (of $\$ 1,237.9$ million) are more than double the current liabilities ( $\$ 518.7$ million). The other way is to see if the working capital (Table 2, \#12A) is greater than the current liabilities. This works because, working capital, by definition, is current assets minus current liabilities.
2. To have cash and receivables equivalent to current liabilities. (This is also called Quick Ratio.) The company should have enough cash on hand to meet the immediate liability obligations. As can be seen from Table 2 (\#13), Medtronic has cash plus receivables ( $\$ 250.6$ million plus $\$ 516.9$ million) that are more than the current liabilities ( $\$ 518.7$ million). Value Line also provides an additional two years of history for these numbers for comparison.

Thus, Medtronic has a very low long term debt, and appears to have sufficient current assets and cash to meet the day-to-day business obligations, providing overall very high marks for Medtronic's management team.

## Question 14

Future growth potential. This question deals with the company's future growth prospects, since we are interested mainly in companies that are likely to grow at a rate of 15 percent or better. Such companies are likely to fulfill our objective of doubling our investment in five years. Here we rely on the professional analysts' (such as Value Line's) understanding of the company, the business and the industry as a whole. In the case of Medtronic, we see from Table 2 (\#14), that earnings and div-
> "When it comes to answering the buy-range question, there are no shortcuts to a full Stock Selection Guide analysis."
idends are projected to grow at annual rates of 20.5 percent and 23.5 percent respectively, well above our expectations of 15 percent. We should, however, keep in mind that the future growth estimates can and do indeed change over time, and thus it is important to obtain analysts' consensus estimates that are as recent as possible. With the advent of the Internet, it should be possible to supplement the Value Line information with the most current data on analysts' earnings estimates once the stock otherwise looks worthwhile.

## Question 15

Is the current $\mathrm{P} / \mathrm{E}$ within or below the past five years average P/E range? This question is really a proxy for another question we want to ask but can't, because it is not possible to answer it easily. That question is, "Is the stock in the buy range?" However, here's a way we can "guesstimate" if the current stock price "might be" in the buy range if we were to do an SSG analysis. (Editor's Note: Be careful with this one, readers! Remember, we're guessing, and we're guessing using someone else's estimates and projections. When it comes to answering the buy-range question, there are no shortcuts to a full Stock Selection Guide analysis.)

Value Line provides both the current $\mathrm{P} / \mathrm{E}$ as well as the average annual P/E (see \#15 in Table 2). In general, if the current $\mathrm{P} / \mathrm{E}$ (this changes as the price of the stock changes), is within or below the range of the past five years of average annual P/Es, then chances are that the stock price would be in the buy range on an SSG, provided that the company's earnings are projected to grow at the same rate or higher than the past earnings growth. So, if the answers to questions 4 and 14 are positive, then a "yes" answer to question 15 would suggest that the stock might be in the buy price range. A current P/E that is higher than the highest average $\mathrm{P} / \mathrm{E}$ achieved in the past five years would suggest that chances are the stock would not be in the buy range currently on an SSG.

One approach would be as follows: If all of the 14 questions above have strongly positive answers, then go ahead and do the SSG analysis to determine the buy price range. You could then follow the company and look for an appropriate price at which to buy the stock. In the case of Medtronic, we see that the current P/E of 34 (as of Sept. 12, 1997) is much above the past five-year range of average $\mathrm{P} / \mathrm{Es}(18-28)$, and thus, the stock is not likely to be in the buy price range. However, since Medtronic scores all the positive answers, we will proceed to do the SSG analysis.

## Question 16

Summary. This summary question is easy to answer in the case of Medtronic since all the answers are positive. Here is a company with a superior history of sales, earnings and dividend increases, consistently for reasonably long periods (five years or longer), at attractive growth rates ( 15 percent or better), with

Continued on page 80

## NAIC/ S\&P Compust at

 Datafiles

NAIC and Standard \& Poor's
Compustat have teamed up to provide the NAIC membership with computerized Stock Selection Guide data on over 3,800 stocks. The datafiles work with NAIC software packages to help you spend less time inputting data and more time doing what is really important -- adding your judgment.

## NAIC/S\&P Compustat Datafiles

- Prices start as low as $\$ 99$. Demo $\$ 5$.
- Available for IBM or Macintosh systems.
- Compatible with all current NAIC Stock Selection Guide Software products.
- Call or Write to NAIC for your FREE Datafile Subscription Information kit.

[^1]
## One-Page Quick Analysis continued from page 66

highly capable and proven management, and with excellent future growth prospects. Thus, it is clear that the company appears to be an excellent candidate for long-term investment, especially if the stock can be bought within the buy price range, and thus worthy of a detailed SSG analysis.

As pointed out before, if the first four questions result in negative answers, we might want to discard that company and move on to find a better stock. Of course, the more positive answers for the stock, the better selection it is likely to be. We should also be on the lookout for the balance of the positive answers.

For example, even if the answers to the first four questions are highly positive, a declining OM coupled with poor ROE numbers should be a red flag. Or, if a successful company is trying to grow rapidly with too much debt and very little cash reserves for contingencies, we have reason to be concerned. A solid investment choice is a company that not only grows by selling desirable products profitably, but also has a proven management that is well prepared to meet the unexpected demands of the business. In case of doubt, one should not hesitate to look for companies with more positive answers. They are out there to be found.

In conclusion, I have found this methodology useful in identifying superior corporations, and I am happy to share it with my fellow investors. Actually, the idea of this Q\&A list was derived from the original research I carried out during my earlier efforts directed at identifying high quality DRP companies, which I have shared with BI readers (see Nov. 1997 issue). My personal experience has been that using this list of questions has made me think of various specific aspects of a company's business, not just what its stock price has done lately.

Gradually over time, this Quick Analysis has become a mental check list when I visit the local library studying weekly Value Line reports. I glance over sales, earnings and dividend histories mentally checking to see if they have grown uninterrupted and if they have at least doubled in the past five years. If I am still interested in the company, then I glance over the OM and ROE history, and finally look at the long-term debt and current financial position.

As I said before, this is only the beginning of the selection process. If the initial screening process is successful, I naturally want to know more about the company. It is, of course, very useful to know the company's products and competitors. What is unique about this company and its products? There is also something to be said about accessing the company's annual report or recent quarterly report (hard copy or online) to understand its future growth strategy, and read more about what other analysts think of the company.

As the NAIC principles teach us, a fairly strict adherence to fundamentals like these could help us to not chase every stock that has doubled in the past 12 months or is a "sure bet to double," but rather focus on solid long-term investment prospects.

## Happy Hunting!


[^0]:    *Source: Lipper Analytical Services, Inc. Fund inception date: 10/31/97.

[^1]:    How to Order To receive your free Datafile Subscription Information Kit, send your request to:
    NAICSoftware
    P.O. Box 220

    Royal Oak, Ml 48068
    

    OR CALL, MON-FRI: (248) 583-NAIC Ext. 379
    Developed by NAIC Software and Standard \& Poor's Compustat, Inc.

