From "Yes and No" to Point Values

The Quick Analysis Revisited

by Kaush Meisheri, Ph.D.

Since *Better Investing* published "A One-Page Quick Analysis of a Stock" in March 1998 *(see page 59)*, hundreds of active NAIC investors have offered feedback about the approach. By all accounts, the Quick Analysis has served as a useful tool. I've used this analysis extensively, and I've made some improvements.

The original analysis has a mostly qualitative feel to it. It is based on a compilation of "yes and no" answers to questions, and there is no weight given to these answers. It's easier to decide if a company has scored almost all "yes" answers, but what if a company has scored 10 or 11 "yes" out of 15 questions? Is the company still worth running through the NAIC Stock Selection Guide?

To reduce such ambiguity, I've designed the new analysis to grade a company on criteria such as sales and earnings history, dividend history, future earnings growth prospects and management's handling of business and finances. The company receives a final score out of a maximum of 100. A score of 80 or higher signifies a superior corporation, a score of 60-79 identifies an average company and a score of less than 60 signifies a below-average company. Other changes have been incorporated to make evaluation of a company less rigid.

Note: This analysis is provided as an educational tool only and should not be construed as the only way to analyze a corporation. An SSG study should always follow for any company being considered for investment. Companies mentioned in this report are included for illustration purposes only, not as buy or sell recommendations.

I kept two guidelines in mind while redeveloping this analysis:
- It should be quick. With some practice, this analysis should take no more than five minutes.
- Value Line reports provide all the data necessary. This analysis does require some calculations, but they're minimal and should pose no problem to anyone used to analyzing stocks the NAIC way. The goal of this analysis is still the same: Identify profitable corporations with consistent records whose managements have demonstrated superior handling of their businesses and finances.

The Quick Analysis is presented in Figure 1 on this page. This table is blank so that copies can be made. *(Editor's note: Because of space restrictions, we've reduced this form to 50 percent of its original size. When photocopying it, set the machine to enlarge to 200 percent and arrange the page so that the form is in the upper left-hand corner of the glass. NAIC members can download a PDF of this form by going to www.better-investing.org and clicking this article in* BI's *online September issue.)*

We will use a company named Medtronic, the same company used in the 1998 article, to illustrate the analysis. The June 7,

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QUICK ANALYSIS OF A STOCK

Company/Ticker: Industry:

Value Line Date/Page: Sales ($): in Year: *(Recent Year Completed)*

Size (Sales): **VS** (<$ 500M); **S** (>$500M- 1B); **M** (>$1 – 5B); **L** (>$ 5 – 10B); **VL** (> $10B)

#	STANDARD	VALUE LINE DATA	SCORE
1	**SALES GROWTH HISTORY:** 1 point each for any of the past 10 years in which sales increased (maximum 10 points).		
2	**SALES GROWTH RATE:** Doubling of sales in 5 years or less, 10 points; subtract 2 points for each additional year.		
3	**EPS GROWTH HISTORY:** 1 point each for any of the past 10 years in which EPS increased (maximum 10 points).		
4	**EPS GROWTH RATE:** Doubling of EPS in 5 years or less, 10 points; subtract 2 points for each additional year.		
5	**DIVIDEND GROWTH HISTORY:** 1 point each for any of the past 5 years in which dividend increased (maximum 5 points).		
6	**3-YEAR OPERATING MARGIN (OM) RANGE:** 10% or Less: 5 points 11 – 14%: 8 points 15 - 19%: 12 points 20% or More: 15 points		
7	**3-YEAR RETURN ON EQUITY (ROE) RANGE:** 10% or Less: 5 points 11 – 14%: 8 points 15 - 19%: 12 points 20% or More: 15 points		
8	**LONG-TERM DEBT AS % OF SHR. EQUITY:** 60% or more: 0 point; 30-60%: 3 points; less than 30%: 5 points		
9	**CURRENT ASSETS-TO-CURRENT LIABILITY RATIO:** Less than 1: 0 point; 1 - 2: 3 points; more than 2: 5 points		
10	**FUTURE EPS GROWTH PROJECTIONS:** 10% or Less: 5 points 11 – 14%: 8 points 15 - 19%: 12 points, 20% or more: 15 points		
	TOTAL SCORE: 80 - 100: superior; 60 – 79: average; less than 60: below average		

By Kaush Meisheri (*Better Investing,* September 2002)

◀ **Figure 1.** To reproduce the Quick Analysis form on a photocopier, enlarge the page to 200 percent and arrange the page so that the form is in the upper left-hand corner of the glass.

1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	© VALUE LINE PUB., INC.	05-07
.56	.77	.87	.96	1.07	1.24	1.44	1.50	1.89	2.31	2.61	2.78	3.53	4.19	4.59	5.30	6.10	6.75	Sales per sh A	9.25
.11	.14	.16	.17	.19	.23	.29	.33	.43	.59	.69	.78	.96	1.13	1.31	1.45	1.65	1.95	"Cash Flow" per sh	2.80
.08	.10	.11	.13	.15	.17	.21	.25	.32	.47	.56	.63	.77	.92	1.05	1.21	1.40	1.65	Earnings per sh B	2.50
.01	.02	.02	.02	.03	.03	.04	.04	.05	.07	.10	.11	.13	.16	.19	.22	.26	.30	Div'ds Decl'd per sh C	.46
.03	.04	.06	.06			.08	.07	.10	.17	.18	.16	.19	.29	.36	.35	.35	.35	Cap'l Spending per sh	.40
.43	.46					.91	1.13	1.44	1.91	1.87	2.18	3.12	3.75	4.56	5.30	6.45	7.85	Book Value per sh D	13.20
						925.12	930.06	924.08	937.27	935.25	938.09	1170.5	1197.7	1209.5	1215.0	1215.0	1215.0	Common Shs Outst'g E	1215.0
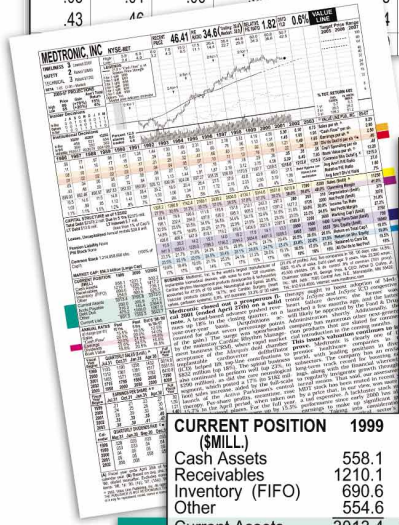
1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		05-07
1328.2	1390.9	1742.4	2169.1	2438.2	2604.8	4134.1	5014.6	5551.8	6410.8	7390	8200	Sales ($mill) A	11250
27.5%	30.6%	31.2%	35.0%	37.0%	39.5%	37.8%	37.3%	39.2%	39.0%	39.0%	40.0%	Operating Margin	41.0%
69.6	78.6	106.5	111.8	116.9	137.6	213.1	243.3	297.3	280	295	310	Depreciation ($mill)	375
198.1	232.4	294.0	437.8	530.0	595.3	905.2	1110.7	1291.2	1477.2	1725	2030	Net Profit ($mill)	3070
32.5%	33.0%	33.5%	34.5%	34.5%	34.4%	34.1%	32.4%	31.9%	31.0%	30.0%	30.0%	Income Tax Rate	31.0%
14.9%	16.7%	16.9%	20.2%	21.7%	22.9%	21.9%	22.1%	23.3%	23.0%	23.3%	24.8%	Net Profit Margin	27.3%
426.6	406.5	647.8	818.1	719.2	979.6	1404.9	2021.9	2397.5	1700.0	2250	2600	Working Cap'l ($mill)	3750
10.9	20.2	14.2	15.3	14.0	16.2	17.6	14.1	13.3	2000	1600	1400	Long-Term Debt ($mill)	750
841.5	1053.5	1335.0	1789.3	1746.2	2044.2	3654.6	4491.5	5509.5	6465	7865	9525	Shr. Equity ($mill)	16040
23.3%	21.7%	21.8%	24.3%	30.1%	28.9%	24.7%	24.7%	23.4%	20.5%	20.5%	20.0%	Return on Total Cap'l	18.0%
23.5%	22.1%	22.0%	24.5%	30.4%	29.1%	24.8%	24.7%	23.4%	23.0%	22.0%	21.5%	Return on Shr. Equity	19.0%
19.6%	18.4%	18.5%	21.1%	25.2%	24.1%	21.2%	20.5%	19.1%	18.5%	17.5%	17.5%	Retained to Com Eq	15.5%
16%	14%	17%	17%	15%	17%	19%	19%	19%	18%			All Div'ds to Net Prof	18%

CURRENT POSITION ($MILL.)	1999	2000	1/25/02
Cash Assets	558.1	1231.7	532.2
Receivables	1210.1	1226.1	1417.2
Inventory (FIFO)	690.6	729.5	738.1
Other	554.6	569.5	625.5
Current Assets	3013.4	3756.8	3313.0
Accts Payable	200.0	205.9	211.2
Debt Due	316.3	145.4	2364.6
Other	475.2	1008.0	1067.9
Current Liab.	991.5	1359.3	3643.7

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '98-'00 to '05-'07
Sales	15.5%	16.5%	12.5%
"Cash Flow"	20.5%	20.0%	14.0%
Earnings	22.0%	21.5%	15.5%
Dividends	22.0%	24.5%	16.5%
Book Value	19.5%	20.5%	19.5%

Figure 2. Value Line's June 7, 2002 report for Medtronic, reprinted by permission of Value Line Publishing, Inc.

2002 Value Line report on Medtronic is presented in Figure 2 above. To make it easier to find the data, I've shown on the Value Line sheet corresponding numbers from Figure 1. Finally, a completed analysis of Medtronic is presented in Figure 3 *(see page 55)*.

At the start, some basic information about the company is filled out on the form. This includes its name, its ticker symbol and its industry. Note the date, since it's important to use the most current Value Line report for analysis. One additional number should be recorded: the most recent year's sales. The sales, or revenue, number is for the most recent calendar year completed; Value Line data is based on the calendar year.

I prefer to identify the size of the company based on its recent sales, from very small (less than $500 million) to very large (greater than $10 billion). This classification is somewhat arbitrary and may be different from that used by NAIC, but it has served me well. The company's final score should always be considered in conjunction with its size, as will be discussed later.

As shown in the top part of Figure 3, Medtronic is in the medical devices industry. The Value Line report itself does not list the industry, but Value Line groups companies in the same industry under a heading given in the index with each issue. Medtronic in its most recently completed year (2001) had sales of about $6.4 billion, so it's identified as a large company.

In the first column of the Quick Analysis table, you input data from the Value Line report for a given criterion. In the second column you assign a numerical score based on the data. At the end a total score is given to the company to help judge its quality. A detailed explanation of my scoring system follows.

1. Sales Growth History

Here we're grading a company on its ability to sell products, and we reward the company for its revenue growth. If a company continues to create more products that more customers want to continue to buy more of, sales growth should continue. Inspection of the Value Line report for Medtronic, marked as Nos. 1 and 2 in Figure 2, shows that starting with 2001 (the most recent calendar year completed) and going back 10 years, sales have progressively been higher each year. We therefore record 10 out of 10 years *(see Figure 3)*.

One point is awarded for any of the past 10 years in which sales increased. Therefore, Medtronic scores the maximum score of 10.

It may be useful to consider some hypothetical situations to understand how the scoring system works. If Medtronic had seen sales decrease, say in the year 1994 and then again in 1998, the score would be 8 because sales increased in eight out of the past 10 years. Unlike in the original analysis, this scoring system is meant not to unduly punish a long-established company for one or two years of weakness.

Another scenario: What if Medtronic saw its sales decline in the most recent two years, 2000 and 2001? The score for Medtronic would still be 8 out of 10. If the company's fundamentals have really deteriorated in the most recent two years, that will show up in its final score. I would be alert to that possibility, but I would not reject the company outright.

If a company has a history of less than 10 years, the maximum score would be proportionally reduced. Note that the SSG requires a minimum history of five years. If you're studying a company that has been public for only seven years and has already seen a sales decline in two of those years, the score would be 5 out of

a maximum 7. This should be a red flag for such a young company that's likely to show up in the company's final score.

2. Sales Growth Rate

It is important not only that a company consistently grows sales, but also that it has an attractive growth rate. During our search we're bound to come across three types of companies: ones that are growing at about 15 percent, others that are growing at a rate considerably slower, and companies that are growing at a rate exceeding 15 percent. This scoring system addresses all three types.

This scoring system awards the maximum possible score of 10 if a company has been able to at least double sales in the most recent five years (an annual compounded rate of growth of approximately 15 percent). Medtronic's sales in 2001 were about $6.4 billion *(see Figure 2)*. To see how long it took for the company to double its sales, find the year in which sales were roughly half of that — $3.2 billion — or less. Medtronic's sales were $2.6 billion in 1997. This means Medtronic more than doubled its sales in four years, from $2.6 billion in 1997 to $6.4 billion in 2001.

The beauty of this analysis is that it allows an investor to do quick but reasonable math; you need not be precise. Once you train yourself to estimate, without using a calculator, how long it took for the company to roughly double its sales, the process becomes faster. Thus, in Figure 3 we indicate four years in the Value Line data column and score the company with the maximum allowable 10 points, since the answer is five years or less.

Since an attractive sales growth rate is important, effort is made to distinguish such companies from slower-growing ones. Points are taken away for the slower growth. The longer it has taken for the company to double its sales, the slower the sales growth rate. The maximum score is 10 for doubling sales within five years. So for each added year it takes for the company to double sales, 2 points are subtracted from the maximum 10 points. If it takes six years to double sales, the score would be 8 (maximum 10 minus 2 points), and so on.

I would look at the most recent completed calendar year, use the approximate sales number for that year, then keep going back until I find the sales number that is roughly half that figure. Count the number of years it took, then use the above rule to award points. So if a company takes 10 years or more to double sales, it would score zero, even though it might have increased sales continuously throughout its 10-year history. We reward the company for its consistency in item 1 but not for its slower growth rate in item 2.

A point should be made about firms that might be growing sales at upward of 25 percent to 40 percent, doubling or even tripling sales in three years. Such companies won't get a score of more than the maximum allowable 10 points. First, it's undesirable to overweight one aspect of the company. Furthermore, history shows that higher growth rates may not be sustainable for long periods.

Second, if the company is really sound in all other aspects, that will certainly show up in its overall final score. I hope fellow NAIC investors would agree that the goal is not just to find the fastest-growing company but to find one that is solid overall. A metaphor is the difference between the Olympic 100-meter sprint, in which only the speed counts, and Olympic ice skating, in which speed, strength, athleticism, grace and artistic presentation are all equally considered.

3. EPS Growth History

A company's earnings history tells us about its profitability. In fact, earnings growth is considered the pivotal driver for a company's stock price in the long run.

Whereas sales are generally reported as absolute sales numbers, earnings (or net profits) are generally reported as earnings per share (EPS). This normalization to per-share data allows us to compare the profitability of one company with that of another, although they each might have a vastly different number of shares outstanding.

Again, as with sales history, we award 1 point for each of the past 10 years the

company has grown its EPS over the previous year. In the case of Medtronic *(see items 3 and 4 in Figure 2)*, we begin with 2001, and looking back we see that the company has successfully increased its EPS each year for the past 10 years. Thus, the score would be 10 out of the maximum 10.

What should we do if a company has an earnings-increase track record that goes back further than 10 years? As you'll notice in Figure 2, Value Line gives EPS data for the past 15 years (unlike the total sales data, provided for only the past 10 years). Although we're asked to record only the past 10 years' EPS history, I suggest that if a company has an unbroken record for more than 10 years, that's worth recording.

Having a record of more than 10 years doesn't increase the firm's score for this measure, but it does provide a longer track record. Medtronic has increased its EPS each year for all of the past 15 years that we can study, so in Figure 3 we record 15 out of 15 years, although the score remains the maximum 10.

Of course, if the company's record of continuous EPS increase has been broken within the past 10 years, there would be no need to go further back. Consider this scenario: Medtronic had continuous EPS increase from 1986 till 1993, a down year in 1994 and again continuous increase from 1995 till 2001. In this case, starting with the year 2001, we would go back 10 years to 1992. Since EPS declined in 1994, the score would be 9; EPS increased in nine out of 10 years.

A score of 6 means that out of the past 10 years, the company increased EPS in six years. But that could be any combination of six of the 10 years. Experience with this analysis shows that an undesirable EPS history will show up in the final score; poor performance here will invariably be reflected in other aspects of a poorly run business.

4. EPS Growth Rate

As with sales growth, we reward a company for its EPS growth rate. Using the standard of EPS growth rates of 15 percent or better, we award the maximum 10 points to a company that has at least

Figure 3. Medtronic scored 90 out of 100 on the Quick Analysis, a superior score.

doubled its EPS within the past five years. The method of scoring is identical to that described for the sales growth rate in item 2. We see in Figure 2 that Medtronic's EPS for 2001 totaled $1.21, so we determine when EPS levels were half that, roughly $.60 or less. We find EPS of $.56 in 1996. Thus, EPS more than doubled within the past five years, giving the a maximum score of 10.

No additional points are awarded for EPS growth rates higher than 15 percent. The discussion about higher sales growth rates *(see item 2)* is applicable to companies with much higher EPS growth rates. That discussion is important enough that the reader is encouraged to reread it for this section as well.

Companies growing slower than 15 percent are scored by subtracting 2 points for each year beyond five years that it takes the company to double its EPS. This point system is identical to the one described above for item 2. Thus if it has taken a company 10 years to double its EPS, the score would be zero, even though the firm might have increased

EPS the past 10 years without interruption. The company would be rewarded for its consistency by scoring 10 points in item 3 but zero on item 4 because of its much slower EPS growth rate.

5. Dividend Growth History

A dividend is the portion of earnings returned to shareholders. Although dividend payout is not a major determining factor for investing, a small but continually increasing dividend in a solid growth firm should be a positive sign.

One point is awarded for each of the past five years the dividend has increased. Note that the company is not rewarded simply for paying a dividend, but for a dividend that has increased.

Medtronic *(see item 5 in Figure 2)* has increased its dividend continuously for the past five years, and thus is awarded the maximum 5 points. If the record of continuously increased dividends goes further than five years, it's worth making a note of it, even though it does not result in a higher score. We notice that Medtronic has increased its dividends

continuously for the past eight years, and we record that in Figure 3.

A midpoint summary is in order here. If a company has not scored at least 25 points out of the maximum 45 points for the above five questions, it's unlikely the firm will be worth further consideration. During my classes I have jokingly made the point that the first five questions are like the initial five "dates" with the company: If it has failed to impress me by now, I would be reluctant to get involved in a long-term relationship.

The reason for requiring a minimum 25-point subtotal for the first five questions is as follows: The company would need a score of 50-55 for the remaining five questions to achieve a respectable score of 75-80 points. A company that has not even scored 25 points in the first five questions is unlikely to attain such a perfect score on the remaining five questions. As you gain experience by analyzing several companies, this point will become clearer and could save time.

So far we've addressed fundamental analysis of a company with regard to its sales, earnings and dividend history. What makes all this possible is the company's top management. Quality leadership is vital in a business since it's directly responsible for the company's success or failure.

The next four criteria are meant to gauge the quality of a company's management. As individual investors, we don't have direct access to the top management of corporations that interest us. We therefore need to rely on some tangible results to measure how the company's top management has put into practice its vision of running a profitable business. Fortunately, Value Line provides historical results that can assist us in this respect.

6. 3-Year Operating Margin Range

This measure rewards management's efficiency in operating the business. A good management team fine-tunes the business model so that there's an appropriate balance between the overall cost of running the business and income derived from the business, which can then result in healthy profits.

This operational efficiency is expressed by a number provided by Value Line — operating margin *(see item 6 in Figure 2)*. Roughly speaking, operating margin (OM) is the operating income before taxes expressed as a percentage of total sales. An OM of 20 percent means that out of every $100 in sales, the company can pocket $20 in profits before taxes. The rest of the $80 goes toward all the expenses incurred in researching, making, marketing and selling the product.

The real difficulties of running a consistently profitable business today are evidenced by the fact that not many firms can continue to generate an optimal OM of 15 percent year after year. A consistent OM of 20 percent or better should therefore be considered superior.

For scoring, identify the most recent three-year range of OM. Medtronic had an OM range of 37 percent to 39 percent for 1999-2001 *(see item 6 in Figure 2)*. To simplify I eliminate decimals of 0.5 or less and substitute 1 for 0.6 and higher. The maximum 15 points are awarded for consistent OM of 20 percent or better, which is the case for Medtronic. The three-year range is chosen because we are interested in performance over a particular period, not just for a single year.

Note that scoring is determined using the lowest number in the three-year OM range. As shown in Figure 1, a different score is awarded for a different OM range. If the OM range overlaps two scores, the lower score should be awarded. For example, a three-year OM range of 12-16 percent would score 8 points. Eight points for the OM range of 11-14 percent overrides the higher score of 12 points for a range of 15-19 percent. It's less important in which of the three recent years the lower OM occurred.

7. 3-Year Return on Equity Range

Here we address the second characteristic of an excellent management: How efficient it is at generating returns on its investments. These investments can be in new technologies, research and development, and sales and marketing.

Management's ability to deploy company earnings and investor capital in meaningful ways is of paramount impor-

tance in making the business grow. This ability can be assessed by studying a number provided by Value Line called return on equity, or ROE *(see item 7 in Figure 2)*. A consistent ROE of 15 percent is respectable; superior companies boast ROE of 20 percent or greater.

Scoring for ROE is similar to that for OM. First, identify the most recent three-year range of ROE. Medtronic had ROE of 23-25 percent for 1999-2001. To simplify, I eliminate decimals of 0.5 or less and substitute 1 for 0.6 and higher.

The scoring uses the lowest number in the ROE range; if the range overlaps two scores, the lower score should be awarded. The maximum 15 points are awarded for consistent ROE of 20 percent or better, which is the case for Medtronic.

In principle I view OM and ROE as the two "eyes" of management and prefer management with 20/20 vision — 20 percent OM and 20 percent ROE. Less-than-perfect vision doesn't make a company undesirable, but perfect vision in management is the ideal. Better vision means less chance of accidents.

8. Long-Term Debt as a Percentage of Shareholders' Equity

This standard deals with management's ability to handle finances. Some debt leveraging might be good for the business, but long-term debt that's too high can be a drain on earnings in a weak economy with high inflation. We therefore reward the management that can grow business internally without incurring too much debt.

A corporation with long-term debt of less than a third of shareholders' equity is awarded the maximum 5 points. Note that this standard is more stringent than that described in the SSG, which uses debt as a percent of total capital (total capital = shareholders' equity + long-term debt). Medtronic in 2001 had long-term debt of $2 billion, which is about 31 percent of shareholders' equity of about $6.5 billion *(see item 8 in Figure 2)*. Therefore, Medtronic receives 3 points for this. If you see that it's very low, you need not calculate the actual number — just say less than 30 percent and award 5 points.

9. Current Assets to Current Liability Ratio

This measure also deals with management's ability to handle finances, in this case day-to-day finances. The ratio of current assets to current liability (the current ratio) shows whether the firm can cover current obligations comfortably.

A ratio of 2 or greater is considered healthy and would be rewarded with the maximum 5 points. The data for Medtronic *(see item 9 in Figure 2)* show that its current ratio is actually less than 1, since current assets are less than current liability. The score for this measure for Medtronic would therefore be zero.

Value Line provides current ratio data for the current year and the previous two years. You need only use the current-year data.

10. Future EPS Growth Projections

In contrast with the other criteria, this standard deals with the company's growth prospects. We're looking for future investment opportunities, so we want assurances that its growth prospects haven't significantly deteriorated.

As a first approximation, we can use professional analysts' consensus about the company's growth. Value Line projects future EPS growth of the company three to five years out *(see item 10 in Figure 2)*. A projected EPS growth rate of 20 percent or more would be considered superior, and the maximum 15 points would be awarded.

I have raised the bar on this measure for a company to achieve a perfect score. Even if the firm slows down a bit, its EPS growth rate could reach 15 percent or better, which would still be respectable. Points are deducted for slower-growing companies. The lower the company's projected EPS growth rate, the lower the score it will attain *(see Figure 1)*. Medtronic's EPS growth is a projected 15.5 percent, so it's awarded 12 points.

Total Score and How To Use It

A company will fall into one of the three categories based on the total score: superior (80-100), average (60-79) or below average (below 60). A "below average" company is not going to be an

attractive candidate for our long-term investment purposes. That doesn't mean you can't profit from making an investment in such a company. It does mean that if our long-term investment philosophy is to identify successful, competent businesses that will reduce undue risk of failures, we will avoid corporations that don't measure up. A consistent equity investment philosophy is as much about avoiding certain companies as it is about identifying desirable ones.

It's up to each of us to determine our minimum standards for choosing a given company as an investment vehicle. A score of 80 tells us that even after subjecting the company to various tests, it has come out with relatively flying colors.

Of course, investment in a company scoring 80 and higher does not guarantee success, but it does provide a somewhat clear picture of the risk we must take to reap the potential rewards. A long history of investment successes based on sound NAIC principles provides clear evidence to support this.

In my experience, selecting a corporation for investment purposes is akin to a blind person attempting to describe an elephant for the first time. Her chances of accurately describing the elephant are greater if she can "touch and feel" it from a variety of viewpoints. The Quick Analysis tools allow us to touch and feel the company so that we're comfortable evaluating it. Would we be as certain in describing this elephant if we focused only on its trunk (sales or earnings growth), tail (dividend growth), front feet (OM and ROE), back feet (long-term debt and current ratio) or massive body (future earnings growth potential)?

I have given some thought to checking the validity of this process. It's well known that the more rigorous and comprehensive the test, the fewer individuals taking the test will pass. Similarly, a screen is valuable only if it allows a very small number of desired objects to be retained. In random testing, I have found that less than 5 percent of the companies score 80 and higher on this analysis.

One additional point about the superior score: The younger the company, the more difficult it is to achieve a score of 80 and higher. This is because questions 1 and 3 are based on the 10-year history, and the younger companies don't usually pay dividends. As a general rule, only companies with at least five years of public history undergo this analysis. Note that it's impossible for a company with fewer than three years of public history to score 80 on this screen. Even for a nondividend-paying, 3-year-old company, the score would have to be perfect on eight of the 10 questions to produce a final score of 80. Experience shows that this isn't easy to achieve.
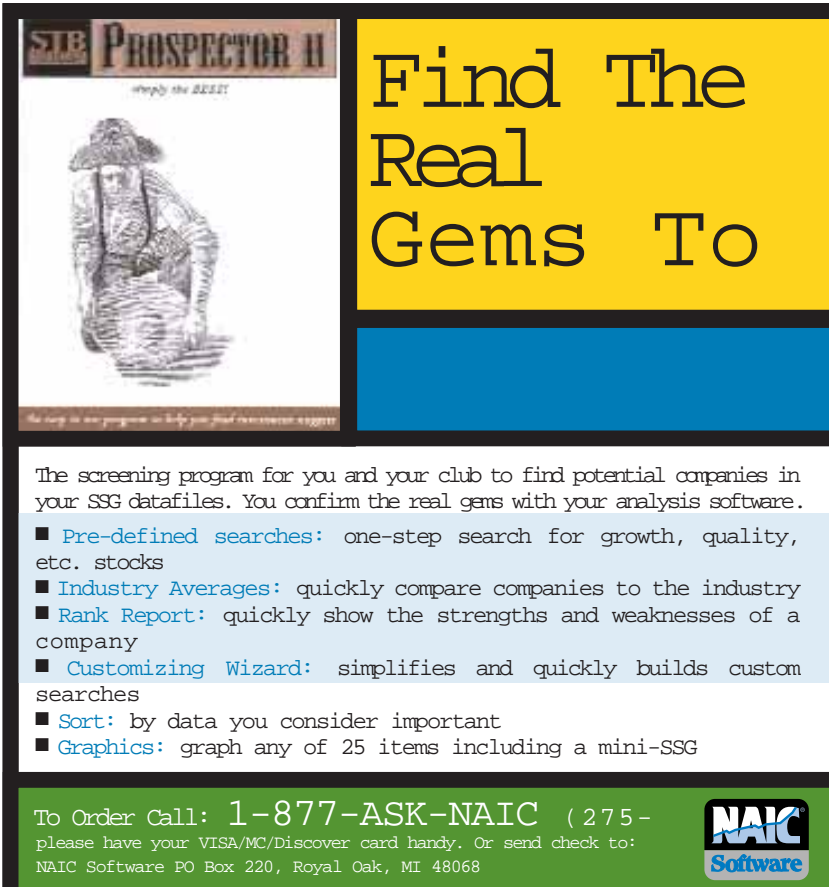
The score of 90 for Medtronic is clearly superior. It's worthwhile to remember, however, that beyond 80 a higher score does not necessarily represent a "better" investment. Don't try to force rank the companies among the ones that score 80 and higher. A company with a score of 91 is not necessarily better than the one scoring 84. The only time it might be reasonable to force rank would be when comparing companies within the same industry subgroup, as I'll discuss next month.

What about the "average" score, 60–79? This is a gray area. Lots of large, established, good-quality companies score in this range. They're certainly worth consideration but require judgments. I can only suggest some guidelines that have helped me. In the end you will have to develop your own as you become more comfortable with this analysis.

For a nondividend-paying company with only five years of history, I require a minimum score of 75. For a dividend-paying, large firm with more than 10 years of history, a score of 70 can be respectable. Within the average category, I allow lesser scores for larger and larger dividend-paying companies. One important principle to remember: When in doubt, always search for a higher-scoring company within the same industry. It's your hard-earned money, and this is what doing your homework is all about.

One final point about this scoring system: Re-evaluate every company either currently in your portfolio or being con-

sidered at the end of each calendar year. Companies are dynamic entities and constantly change in response to business conditions. The updated scoring should reflect how well the company has handled those changing conditions.

We now come to a significant milestone. Once you have become attracted to a company based on this analysis, what's the next step?

First, any additional research that allows you to understand the company's business niche and its potential for success is extremely valuable. Train yourself to state in no more than two or three sentences what the company does and what makes it stand apart. This will help crystallize in your mind the most significant attributes of the company's business.

If you're still attracted to the company, the next step would be to complete the SSG. By properly completing the Quick

Analysis, you already have an idea of what Parts 1 and 2 of the SSG will look like. The most critical components to pay attention to therefore are Parts 3 and 4 of the SSG.

Parts 3 and 4 allow us to study the history of the company's valuations and to extrapolate appropriate buy-and-sell price ranges for the stock over the next five years. The Quick Analysis allows us to get better at the first step in successful investment: deciding what to buy. We then need to analyze and understand when to buy and what is a reasonable price to pay for the stock of the company we like.

The Quick Analysis doesn't address this second issue, which is just as important as the first for investment success, and thus should be viewed as a starting point. Properly understanding and completing the Quick Analysis along with properly understanding and completing the SSG should allow you to rationally consider adding a particular stock to your portfolio or to your investment club's portfolio. In summary, the

quality of an individual company, valuation of the stock, potential upside-downside ratio (reward-to-risk ratio) and portfolio diversification are all essential to a successful investment process.

This analysis has been extended so that a company can be compared with competitors in its industry. I'll discuss the comparative analysis next month. ∎

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(Table 1) QUICK ANALYSIS OF A STOCK

Company/Ticker: Industry:

Value Line Date/Page: Sales ($):   in Year: *(Recent Year Completed)*

Size (Sales): **VS** (<$ 500M);   **S** (>$500M- 1B);   **M** (>$1 – 5B);   **L** (>$ 5 – 10B);   **VL** (> $10B)

#	STANDARD	VALUE LINE DATA	SCORE
1	**SALES GROWTH HISTORY:** 1 point each for any of the past 10 years in which sales increased (maximum 10 points).		
2	**SALES GROWTH RATE:** Doubling of sales in 5 years or less, 10 points; subtract 2 points for each additional year.		
3	**EPS GROWTH HISTORY:** 1 point each for any of the past 10 years in which EPS increased (maximum 10 points).		
4	**EPS GROWTH RATE:** Doubling of EPS in 5 years or less, 10 points; subtract 2 points for each additional year.		
5	**DIVIDEND GROWTH HISTORY:** 1 point each for any of the past 5 years in which dividend increased (maximum 5 points).		
6	**3-YEAR OPERATING MARGIN (OM) RANGE:** 10% or Less: 5 points 11 – 14%: 8 points 15 - 19%: 12 points 20% or More: 15 points		
7	**3-YEAR RETURN ON EQUITY (ROE) RANGE:** 10% or Less: 5 points 11 – 14%: 8 points 15 - 19%: 12 points 20% or More: 15 points		
8	**LONG-TERM DEBT AS % OF SHR. EQUITY:** 60% or more: 0 point; 30-60%: 3 points; less than 30%: 5 points		
9	**CURRENT ASSETS-TO-CURRENT LIABILITY RATIO:** Less than 1: 0 point; 1 - 2: 3 points; more than 2: 5 points		
10	**FUTURE EPS GROWTH PROJECTIONS:** 10% or Less: 5 points; 11 – 14%: 8 points 15 - 19%: 12 points; 20% or more: 15 points		
	TOTAL SCORE: 80 - 100: superior; 60 – 79: average; less than 60: below average		