HOW TO INVEST IN COMMON STOCKS
The Complete Guide to Using THE VALUE LINE INVESTMENT SURVEY

Value Line Publishing, Inc.
220 East 42nd Street, New York, NY 10017-5891
email Address: vlcr@valueline.com
1-800-634-3583
www.valueline.com
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**Glossary**
A Statement from Jean B. Buttner,
Chairman and CEO
of Value Line Publishing, Inc.

Investors need to have unbiased and independent research! That is something Value Line subscribers have known for over 70 years. Value Line has no investment banking business with any company, including the approximately 1,700 companies our analysts follow. Unlike typical Wall Street brokerage firms, Value Line does not execute trades for its subscribers and therefore has no vested interest in whether its subscribers buy, sell or hold. Our staff of professional securities analysts may not own shares of a company that they are assigned to cover. Our subscribers receive only the highest quality of unbiased and independent research.

We utilize a time-proven disciplined system that ranks a company’s relative performance over the next 12 months from 1, Highest, to 5, Lowest. Our record of performance speaks for itself: From April 16, 1965 through June 30, 2004, the Value Line stocks ranked No. 1 for Timeliness outperformed the Dow Jones Industrial Average and the Standard & Poor’s 500 Indexes by more than 38 to 1.

If you are looking for unbiased, independent, and objective investment research and ideas, look no further than Value Line - we answer only to you.

Very truly yours,

Jean B. Buttner,
Chairman & CEO
CHAPTER

1

GETTING STARTED

How to use The Value Line Investment Survey

The Value Line Investment Survey is a unique source of financial information designed to help investors make informed investment decisions that fit their individual goals and levels of risk. It is: (1) a proven forecaster of stock price performance over the next six to 12 months; (2) a source of interpretative analysis of approximately 1,700 individual stocks and more than 90 industries; and (3) a source of historical information that helps investors spot trends.

If you come across any unfamiliar terms as you read through this guide, please refer to the Glossary which begins on page 30.

Part 1 - Summary & Index

Please start with the Summary & Index. The front cover contains a Table of Contents, three important market statistics, and a list of all the industries we follow in alphabetical order with the relative industry rank to the right of the industry name and the page number of the industry analysis in Ratings & Reports listed under PAGE. The market statistics are found in three boxes. The first box (a) has the median of estimated price/earnings ratios of all stocks with earnings in The Value Line Investment Survey. The second box (b) shows the median of estimated dividend yields (total dividends expected to be paid in the next 12 months divided by the recent price) of all dividend-paying stocks in The Survey. The third box (c) contains the estimated median price appreciation potential 3 to 5 years into the future for the approximately 1,700 stocks in The Survey. By studying these statistics, a fairly good picture emerges of how the universe of Value Line stocks is currently being evaluated. The Value Line universe of approximately 1,700 stocks has a market value of more than $14 trillion, and is quite representative of the whole stock market.

Beginning on page 2, the Summary & Index also includes an alphabetical listing of all stocks in the publication with references to their location in Part 3, Ratings & Reports. If you are looking for a particular stock, look inside the Summary & Index section, which is updated each week to provide the most current data on all companies included in The Value Line Investment Survey.

To locate a report on an individual company, look for the page number just to the left of the company name. Then turn to that page in Part 3, Ratings & Reports, where the number appears in the upper right corner.
There are many columns in the Summary & Index with more information on each of the approximately 1,700 stocks we cover, including from left to right:

- page numbers for the latest company report and any recent Supplementary Report (Supplementary Reports are published at the back of Ratings & Reports)
- the name of each stock and the exchange on which it is traded (the New York Stock Exchange, unless otherwise indicated).
- each company's stock exchange (ticker) symbol
- the recent stock price (see the top of page 2 in Summary & Index under Index to Stocks for the specific date)
- Value Line's proprietary Timeliness™, Safety™ and Technical™ ranks (See Chapter 3 and the Glossary for definitions)
- Beta (a measure of volatility)
- each stock's 3- to 5-year Target Price Range and the % appreciation potential
- each stock's current P/E ratio
- each stock's % estimated dividend yield
- each stock's estimated earnings (approximately 6 months historical, 6 months estimated)
- each stock's estimated dividends for the next 12 months
- each stock's Value Line Industry™ rank (see Chapter 6)
- latest earnings and dividend declarations
- options trade indicator

There is also a wealth of information in the form of stock screens toward the back of the Summary & Index. The stock screens are a good place to start for anyone looking for investment ideas or help in forming a strategy. They are also useful for investors who want a list of stocks relevant to specific strategies they may have in mind.

Some examples of our useful screens are:

- Industries in Order of Timeliness
- Stocks Moving Up or Down in Timeliness Rank
- Timely Stocks in Timely Industries
- Conservative Stocks
- Highest Dividend Yielding Stocks
- Stocks with the Highest Estimated 3- to 5-Year Price Appreciation Potential
- Best/Worst Performing Stocks in the Past 13 Weeks
- Stocks With the Lowest and Highest P/E Ratios
- Stocks with the Highest Estimated Annual Total Returns (Next 3 To 5 Years)
- Stocks with the Highest Projected 3- to 5-Year Dividend Yield
- Highest Growth Stocks (Definition Under The Title)

Part 2 - Selection & Opinion

Selection & Opinion (S&O) contains Value Line's latest economic and stock market commentary and advice, along with one or more pages of research on interesting stocks or industries, and a variety of pertinent economic and stock market statistics. It also includes three model stock portfolios.
Part 3 - Ratings & Reports

Ratings & Reports is the core of The Value Line Investment Survey with one-page reports on approximately 1,700 companies and one- or two-page reports on more than 90 industries. The company reports contain Timeliness, Safety and Technical ranks, our 3- to 5-year forecasts for stock prices, income and balance sheet data, as much as 17 years of historical data, and our analysts' commentaries. They also contain stock price charts; quarterly sales, earnings, and dividend information; and a variety of other very useful material. Each page in this section is updated every 13 weeks. When unexpected important news occurs during these 13 week intervals, a Supplementary Report (appearing in the back section of Ratings & Reports) is published. If there is a Supplementary Report, its page number will be shown in the far left hand column of the Summary & Index, near the company name.

Two asterisks — ★★ — indicate that a Supplementary Report is in this week's Edition.

Every week subscribers receive a new Issue of Ratings & Reports containing approximately 135 company reports grouped by industry and a smaller number of one- or two-page industry reports. The industry reports precede the reports on the companies in that industry. Over the course of three months, new reports are issued on all of the approximately 1,700 companies and more than 90 industries.
Diversification

Most investors believe in owning a diversified portfolio of stocks, a strategy that Value Line strongly recommends. A diversified portfolio usually fluctuates less in its entirety than does an individual stock because the price variations of individual stocks tend to cancel each other out, with some moving up while others move down. It is also important to diversify not only among stocks, but also across industries.

For most individual investors, a practical rule for diversifying is to hold a total of at least ten stocks in approximately equal dollar amounts in at least ten or more different industries.

Creating a Diversified Portfolio

A good way to start is to turn to the screen called Timely Stocks In Timely Industries, usually found on page 25 of the Summary & Index.

This screen not only lists the industries that Value Line currently ranks highest (based on our Timeliness Ranking System, discussed in Chapter 3), but also the stocks that have the highest Timeliness ranks in those timely industries.

Select ten or more industries you think might be attractive from among those with the highest industry ranks. At this point, you may want to read the pages on specific industries to help you make a decision. The industry reports precede the reports on the companies in their industry. Then select one or two of the stocks ranked highest for Timeliness within each industry. The pages in Ratings & Reports examine these stocks in great detail.

Many of the stock screens in the back pages of the Summary & Index can be useful in creating a diversified portfolio. For instance, if you are interested in stocks of companies with growing sales, cash flow, earnings, dividends, and book value, study the Highest Growth Stocks screen. To be included in this list, a company’s annual growth of sales, cash flow, earnings, dividends and book value must together have averaged 11% or more over the past 10 years and be expected to average at least 11% in the coming 3-5 years. There are many screens of stocks in the back section of the Summary & Index which will help you form a diversified portfolio. As mentioned elsewhere in this guide, Selection & Opinion also contains model portfolios which can be used to obtain ideas for any investor’s portfolio.
The Value Line Investment Survey has a number of unique features that distinguish it from other advisory services and make it easier for you to have accurate, timely information so that you may keep up to date on all developments affecting your investments.

Probably the most famous are Value Line's time-honored ranking systems for Timeliness and Safety, which rank approximately 1,700 stocks relative to each other for price performance during the next six to 12 months. The newer Value Line Technical Ranking System is designed to predict short-term stock price movements. In each case, stocks are ranked from 1 to 5, with 1 being the highest ranking.

Note: Any one Value Line stock rank is always relative to the ranks of all other stocks in the Value Line universe of approximately 1,700 stocks.

**Timeliness**

The Value Line **Timeliness** rank measures relative probable price performance of all of the approximately 1,700 stocks during the next six to 12 months on an easy-to-understand scale from 1 (Highest) to 5 (Lowest). The components of the Timeliness Ranking System are the 10-year trend of relative earnings and prices, recent earnings and price changes, and earnings surprises. All data are actual and known. A computer program combines these elements into a forecast of the price change of each stock, relative to all other approximately 1,700 stocks for the six to 12 months ahead.

**Rank 1 (Highest):** These stocks, as a group, are expected to be the best performers relative to the Value Line universe during the next six to 12 months (100 stocks).

**Rank 2 (Above Average):** These stocks, as a group, are expected to have better-than-average relative price performance (300 stocks).

**Rank 3 (Average):** These stocks, as a group, are expected to have relative price performance in line with the Value Line universe (approximately 900 stocks).

**Rank 4 (Below Average):** These stocks, as a group, are expected to have below-average relative price performance (300 stocks).

**Rank 5 (Lowest):** These stocks, as a group, are expected to have the poorest relative price performance (100 stocks).

Changes in the Timeliness ranks can be caused by:

1. New earnings reports
2. Changes in the price movement of one stock relative to the approximately 1,700 other stocks in the publication
3. Shifts in the relative positions of other stocks
Value Line's Timeliness Rank Record

The Value Line Timeliness Ranking System has been operating essentially in its present form since 1965. Its exemplary record has attracted the attention of academicians and has been the subject of numerous articles in scientific and financial journals.

Our performance record is discussed here and shown in the graphs on pages 9 and 10. The first shows that through December 2004 our 1-ranked stocks appreciated 49,441% (before commission costs and before dividends) since 1965. That compares with a gain of 1,082% for the Dow Jones Industrial Average. That is, if you consistently owned the one hundred stocks ranked number one out of the total of approximately 1,700, the portfolio, as a whole, would have appreciated more than 49,000%. The second graph shows that if you bought all our 1-ranked stocks at the beginning of January of each year, held them until the end of December, and then set up a new portfolio of 1-ranked stocks at the beginning of each subsequent year, the portfolio would have risen 19,715% since 1965. These are records we believe nobody else has ever matched.

Making Changes Weekly

Value Line has been calculating changes in the Timeliness Ranking System on a weekly basis for more than 37 years and has been publishing the results of those changes in Selection & Opinion. The record of weekly performance is outstanding and is shown in the chart and table on page 9. There you can see just how stocks ranked 1, 2, 3, 4, and 5 have done, assuming that all rank changes were implemented each week.

What you can clearly see is that there have been spectacular results not only for stocks in Groups 1 and 2, but also, in reverse, for those in Groups 4 and 5. You can see that our evaluations for Timeliness are equally effective in showing both good stocks to seek and poor ones to avoid.

Stocks ranked 1 and 2 for Timeliness cannot be expected to outperform the market in every single week or month. But over a longer period, the expectation that they will do so as a group is warranted, as our actual results demonstrate.

Making Annual (Once a Year) Changes

Most investors do not buy and sell stocks every week. Frequent “trading” may result in large commission costs. For these reasons, we have also regularly published a record of the results of annual changes in the Timeliness Ranking System. In what we call the “Frozen Record,” we assume that investors buy stocks on the first business day of each year and hold them until the last day of the same year. Here, too, the top groups have consistently surpassed the growth of the other groups, as can be seen on page 10.

Safety

A second investment criterion is the Safety rank assigned by Value Line to each of the approximately 1,700 stocks. The Value Line Safety rank measures the total risk of a stock relative to the approximately 1,700 other stocks. It is derived from a stock’s Price Stability rank and from the Financial Strength rating of a company, both shown in the lower right hand corner of each page in Ratings & Reports. Safety ranks are also given on a scale from 1 (safest) to 5 (riskiest) as follows:

**Rank 1 (Highest):** These stocks, as a group, are the safest, most stable, and least risky investments relative to the Value Line universe, which accounts for about 95% of the market volume of all stocks in the U.S.

**Rank 2 (Above Average):** These stocks, as a group, are safer and less risky than most.

**Rank 3 (Average):** These stocks, as a group, are of average risk and safety.

**Rank 4 (Below Average):** These stocks, as a group, are riskier and less safe than most.

**Rank 5 (Lowest):** These stocks, as a group, are the riskiest and least safe.
Stocks with high Safety ranks are often associated with large, financially sound companies; these same companies also often have somewhat less than average growth prospects because their primary markets tend to be growing slowly or not at all. Stocks with low Safety ranks are often associated with companies which are smaller and/or have weaker than average finances; on the other hand, these smaller companies sometimes have above-average growth prospects because they start with a lower revenue and earnings base.

Value Line’s Safety Rank Record

Safety becomes particularly important in periods of stock market downswings, when many investors want to try to limit their losses. As with Timeliness, the record of Safety over the years is impressive. When you study the data (shown in the table below), you will find that stocks with high Safety ranks generally fall less than the market as a whole when stock prices drop. The table shows how Safety ranks worked out in all major market declines between 1966 and the present.

The lesson is clear. If you think the market is headed lower, but prefer to maintain a fully invested position in stocks, concentrate on stocks ranked 1 or 2 for Safety. Also, at the same time, try to keep your portfolio ranked as high as possible for Timeliness. You may not be able to find stocks ranked high on both counts. You then must decide which is more important—price performance over the next six to 12 months, or Safety. A compromise of picking stocks ranked 1 or 2 for Timeliness and 1 or 2 for Safety may be necessary.

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<td>-28.6%</td>
<td>-40.5%</td>
<td>-10.5%</td>
<td>-24.7%</td>
<td>-19.0%</td>
<td>-6.1%</td>
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<td>-20.8%</td>
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<td>-28.7%</td>
<td>-15.5%</td>
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<td>-41.7%</td>
<td>-55.2%</td>
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<td>-70.0%</td>
<td>-31.4%</td>
<td>-46.9%</td>
<td>-33.1%</td>
<td>-37.8%</td>
<td>-34.3%</td>
<td>-51.7%</td>
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</table>

The Penalty and Reward of Risk

A risky stock is one which has low price stability and whose price fluctuates widely around its own long-term trend. It may also be a stock of a company with a low Financial Strength rating. One may reasonably assume that the price of a risky stock will go up more than that of a safe stock in a generally strong market. Yet, if in the interim it went down more sharply and you had to sell at an inopportune time, you could suffer a heavier penalty for having bought the high-risk stock instead of the safer one.

High Value Line Timeliness ranks give some protection against a general market decline, but only over a period of six to 12 months. They cannot be relied upon to help protect against a sharp drop in the stock market in every week or month, as a high Safety rank may often do.

Technical

The Value Line Technical rank uses a proprietary formula to predict short-term (three to six month) future price returns relative to the Value Line universe. It is the result of an analysis which relates 10 price trends of different duration for a stock during the past year to the relative price changes of the same stock expected over the succeeding three to six months. The Technical rank is best used as a secondary investment criterion. We do not recommend that it replace the Timeliness rank. As with the other ranks, the Technical rank goes from 1 (Highest) to 5 (Lowest.)
The results of the Technical ranks since the beginning of 1984, are shown below. From that data, we can calculate that from December 31, 1983, through December 2002, the stocks with a Technical rank of 1 rose 1105%. Those ranked 5 rose just 17%. By way of comparison, the Standard & Poor’s 500 Stock Index, a recognized measure of broad stock market performance, was up 433% in the same period.

### Industry

Value Line also publishes Industry ranks which show the Timeliness of each industry. These ranks are updated weekly and published on the front and inside pages of the Summary & Index. They also appear at the top of each Industry Report. The Industry Rank is calculated by averaging the Timeliness ranks of each of the stocks which have been assigned a Timeliness rank in a particular industry. For more information, see page 22.

### Record of Technical Ranks (Quarterly Rebalancing)

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BUYING AND SELLING STOCKS EACH WEEK

Record of Value Line Ranks for Timeliness
Allowing for Changes in Rank Each Week (1965 - 2004)

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<th>Cumulative Return</th>
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<td>49,441%</td>
<td>16.9%</td>
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<td>2</td>
<td>-4,615%</td>
<td>10.2%</td>
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<td>3</td>
<td>-324%</td>
<td>3.7%</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>-96%</td>
<td>-8.1%</td>
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Group 1: 49,441% 16.9%
Group 2: -4,615% 10.2%
Group 3: -324% 3.7%
Group 4: -45% -1.5%
Group 5: -96% -8.1%

April 16, 1965 to December 31, 2004

RECORD OF VALUE LINE RANKINGS FOR TIMELINESS (ALLOWING FOR CHANGES IN RANK EACH WEEK)

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<th>'68</th>
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* April through December
† Geometric Averaging
### Record of Value Line Ranks for Timeliness

**Allowing for Annual Changes in Rank (1965 - 2004)**

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**Dow Jones Industrials**

1,082%

**S&P 500**

1,275%
To start studying a stock, we suggest that you concentrate on four features found on every Ratings & Reports page (see sample on page 21 of this guide). First, we recommend that you look at the Timeliness, Safety, and Technical ranks (see item 1) shown in the upper left corner of each page. Then, read the Analyst’s Commentary (item 17) in the bottom half of each report. Next, we suggest you look at our forecasts for various financial data including the stock price (items 11, 15, 22, 23, and 29). These forecasts are explained in more detail later in this Chapter. Finally, we think you should study the historical financial data appearing in the Statistical Array in the center of the report (item 26). Illustrations and more detail follow. There is also a lot of other useful information on each page, but the four features mentioned above provide the best place to begin.

Value Line Ranks
(See 1 in the example on page 21)

A synopsis of the Value Line Ranking System follows. For a more detailed description, please refer to Chapter 3.

Timeliness

The Timeliness rank is Value Line’s measure of the expected price performance of a stock for the coming six to 12 months relative to our approximately 1,700 stock universe. Stocks ranked 1 (Highest) and 2 (Above Average) are likely to perform best relative to the others. Stocks ranked 3 are likely to be average performers relative to the

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Value Line universe. Stocks ranked 4 (Below Average) and 5 (Lowest) are likely to underperform stocks ranked 1 through 3 in Value Line’s stock universe.

Just one word of caution. Stocks ranked 1 are often volatile and tend to have smaller market capitalizations (the total value of a company’s outstanding shares, calculated by multiplying the number of shares outstanding by the stock’s market price per share). Conservative investors may want to select stocks that also have high Safety ranks because they are usually more stable issues.

Safety

The Safety rank is a measure of the total risk of a stock compared to others in our approximately 1,700 stock universe. As with Timeliness, Value Line ranks each stock from 1 (Highest) to 5 (Lowest). However, unlike Timeliness, the number of stocks in each category from 1 to 5 is not fixed. The Safety rank is derived from two measurements (weighted equally) found in the lower right hand corner of each page:
a company’s Financial Strength and a Stock’s Price Stability. Financial Strength is a measure of the company’s financial condition, and is reported on a scale of A++ (Highest) to C (Lowest). The largest companies with the strongest balance sheets get the highest scores. A Stock’s Price Stability score is based on a ranking of the standard deviation (a measure of volatility) of weekly percent changes in the price of a stock over the last five years, and is reported on a scale of 100 (Highest) to 5 (Lowest) in increments of 5.

**Technical**

The Technical rank is primarily a predictor of short term (three to six months) relative price change. It is based on a proprietary model which examines 10 short-term price trends for a particular stock over different periods in the past year. The Technical ranks also range from 1 (Highest) to 5 (Lowest). At any one time, approximately 100 stocks are ranked 1; 300 ranked 2; 900 ranked 3; 300 ranked 4; and 100 ranked 5.

**Beta**

This is a measure of volatility, as calculated by Value Line. While it is not a rank, we do consider it important. See the Glossary for more detail.

**Analyst’s Commentary**

(17 in the example on page 21)

Next, look at the analyst’s written commentary in the lower half of the page. Many readers think this is the most important section of the page. In the commentary, the analyst discusses his/her expectations for the future. There are times when the raw numbers don’t tell the full story.

The analyst uses the commentary to explain why the forecast is what it is. The commentary is also particularly useful when a change in trend is occurring or about to occur. As an example, a stock may have a poor Timeliness rank but the analyst thinks earnings could turn around in the future. In this case, the analyst may use the commentary to explain why he/she thinks conditions are likely to get better, thus giving the subscriber insight into what is happening, and why.

**Financial and Stock Price Projections**

Value Line’s security analysts make a variety of financial and stock price projections in most reports we publish. They make Estimates for 23 different numbers and ratios going out 3 to 5 years into the future in the Statistical Array (item 15). They also forecast a Target Price Range (item 11) for each stock, going out 3 to 5 years. And finally they show the 2007-09 Projections (item 29) for the price of the stock, along with the expected percentage appreciation (depreciation) and the expected annual total return (including dividends). These projections are discussed below.

**Financial Estimates**

(15 in the example on page 21)

In the Statistical Array in the center of the report (where most of the numbers are), Value Line provides both historical data and financial projections. All projections are printed in bold italics.

The estimates of sales, earnings, net profit margins, income tax rates, and so forth are all derived from spread
sheets maintained on every company. Our analysts try to review their projections with a company’s management whenever they think they should, but at least once a quarter. Afterward, they make whatever adjustments they believe are warranted by unusual developments that may not be revealed in the numbers, i.e., the outcome of pending lawsuits affecting the company’s finances, the success of new products, etc.

**Target Price Range**

In the upper right-hand section of each report is a Target Price Range. The Target Price Range represents the band in which the expected average price is likely to fall.

This is the projected annual stock price range for the period out 3 to 5 years. The prices are based on the analyst’s projections in the period out 3-5 years for earnings multiplied by the average annual price/earnings ratio in the Statistical Array for the same period. The width of the high-low range depends on the stock’s Safety rank. (A stock with a high Safety rank has a narrower range, one with a low rank, a wider band.)

**3- to 5- Year Projections**

(Also see item 29, on page 21)

The Target Price Range and 3- to 5-year Projections are necessarily based upon an estimate of future earnings. They are, therefore, very subjective. These should not be confused with the Timeliness rank for 12-month performance, which is independent of estimates and based solely on historical data.

**Annual Rates Of Change**

(Item 23, on page 21)

At this point, it may be helpful to look at the Annual Rates box in the left-hand column. This box shows the compound annual per share growth percentages for sales, “cash flow,” earnings, dividends and book value for the past 5 and 10 years and also Value Line’s projections of growth for each item for the coming 3 to 5 years. All rates
of change are computed from the average number for a past 3-year period to an average number for a future period. For details, see below.

Trends are important here. Check whether growth has been increasing or slowing and see if Value Line's analyst thinks it will pick up or fall off in the future. Specific estimates for various data items for 3 to 5 years out can be found in **bold italics** print in the far right hand column of the Statistical Array (item 15).

Historical Financial Data
(26 in the example on page 21)

Many investors like to use the Statistical Array to do their own analysis. They, in particular, use the historical data in the center of each report to see how a company has been doing over a long timeframe. It is worth pointing out that while all of the data are important, different readers find different data items to be most useful.

The numbers are probably most helpful in identifying trends. For example, look at sales per share to see if they have been rising for an extended period of time. Look at operating margins and net profit margins to see if they have been expanding, narrowing or staying flat. And examine some of the percentages near the bottom, such as the Return on Shareholders' Equity, to see if they have been rising, falling, or remaining about the same.

**Calculating Annual Rates of Change**

(Growth Rates)

In an attempt to eliminate short-term fluctuations that may distort results, Value Line uses a **three-year** base period and a **three-year** ending period when calculating growth rates.

**Example:** To calculate the compound annual sales growth from 2001-2003 (the latest years for which reported actual financial results were available when our Johnson & Johnson report on page 21 went to press) to 2007-2009, we take sales per share for each of the years 2001, 2002, and 2003 and average them. Then we take the sales per share for the years 2007-2009, as shown in the far right column of the large statistical section of our report.

In the case of Johnson & Johnson, the three-year base period average is $12.16. The three-year ending period average is $21.40. The compound annual growth rate over the seven years from 2002 (the middle year) to 2008 (again, the middle year) is 10.0%, rounded.

Investors often try to calculate a growth rate from one starting year to one ending year, and then can’t understand why the number they get is not the same as the one published by Value Line. If they used a three-year base period and three-year ending period, they would get the same results we do.
In the following section, we are going to examine an actual Value Line page, with the objectives of interpreting the array of statistical data presented and weighing the data and the accompanying comment against your needs. We have chosen for examination a report on Johnson & Johnson, a large and well known manufacturer of health care products.

**Putting Data in Perspective**

Looking at the top of the page, we can see that Johnson & Johnson's stock price in September 2004 was $57.66 a share (item 5 on page 21). By itself, the stock price means very little. In the line below the price, annual high and low prices for each year from 1993 through late 2004 are indicated. Below the high and low annual prices is a price chart (graph) that shows monthly price ranges for essentially the same period, along with other useful information that we will discuss below. We note here, though, that while Johnson & Johnson stock has traded in a relatively narrow range for nearly four years, it has still climbed more than sixfold from its low of 8.9 in 1993 (adjusted for stock splits in 1996 and 2001).

Is the fact that the stock has moved up so much cause for concern? Has it become overvalued? Not necessarily—we will see. Sales per share, cash flow per share, earnings per share, and book value per share are all at historical highs, as can be seen in the Statistical Array (items 15 and 26 on page 21).

**Price Earnings Ratio**—This is probably the most widely used measure of stock valuation. Value Line shows a variety of P/E ratios on every company page, as discussed below:

The P/E ratio on the very top of the Value Line page (item 6 on page 21). This is calculated by dividing the recent price of the stock by the total of the last six months of earnings and the next six months of estimated earnings.

The Relative P/E ratio (item 8). This compares the P/E of one stock with the median of estimated P/E ratios of all stocks under Value Line review. A relative P/E of more than 1 indicates that a stock's P/E ratio is currently higher than that of the Value Line universe; a P/E of less than 1 indicates that this stock's P/E is less than the Value Line average.

The Trailing P/E ratio (item 7). This is calculated by dividing the recent price of the stock by the past 12 months of actual (reported) earnings. This is the figure shown in most newspapers.

The Median P/E ratio (item 7). This is the average annual P/E ratio of a stock over the past 10 years, with certain statistical adjustments made for unusually low or high ratios.

The Average Annual P/E ratio (items 15 and 26). This figure is calculated by dividing the average price for each year by the actual reported earnings for the same year and is shown in the Statistical Array.
The Relative (Annual) P/E ratio (items 15 and 26). This figure is calculated by dividing the Average Annual P/E of a stock with the Average Annual P/E of all stocks under Value Line review in the same year.

To gauge the significance of the recent price of a stock, the reader must look at the price in relation to a variety of data. As far as P/Es are concerned, the current P/E ratio and relative P/E ratio for Johnson & Johnson's stock, while above those of most stocks in the Value Line universe, are still quite close to the Value Line median P/E. These slightly above-average valuations underscore investors' long standing favor for this equity.

High P/E ratios may mean that the stock is over-priced, unless there are factors indicating that there will be a significant improvement in the company's fundamentals. Is this the case with Johnson & Johnson? Perhaps, since management has been very vigilant in its efforts to maximize returns from its businesses, and the Value Line analyst is expecting continued strong profit growth over the next three to five years. High growth rates often result in above-average price/earnings ratios. Johnson & Johnson's relative P/E ratio of 1.09 (item 8), a slightly richer valuation than found in the average stock followed by Value Line, also likely reflects the company's track record and growth expectations.

The Dividend Yield (item 10 in the right top corner of the page) shows the expected return from cash dividends on the stock over the next 12 months, as a percentage of the recent price. Johnson & Johnson's yield of 2.0% is above the median of all dividend paying stocks in the Value Line universe. (The median is shown each week on the cover of the Summary & Index section.) We also see that the company has increased the dividend in every year since 1988, as shown in line four of the Statistical Array in the center of our report, and Value Line's analyst thinks additional increases are forthcoming. Many investors view regular increases in a dividend very positively.

The Price Chart

Next, look at Johnson & Johnson's price chart (or graph) at the top of the report. The first thing to look at is the price history, shown by the small vertical bars in the center of the graph. Those bars show the high and low monthly prices for the stock (adjusted for any subsequent stock splits or dividends). Looking at the bars, you can see that the stock price was in a strong uptrend from 1994 through 1999. Since then, it has traded in a broad range, generally between 40 and 60.

Now look at the "cash flow" line, the solid line running from 1992 through the middle of 2003, which is more fully described below. The dashed line from mid-2003 to mid-2005, which is an extension of the "cash flow" line, is Value Line's projection of the line for those years. For most of the past nine years, Johnson & Johnson's stock has traded above the "cash flow" line. More recently, the stock has moved back down to the line.

Finally, look at the Relative Strength Price line, the faint small dotted line, usually toward the bottom of the chart. This shows the relative performance of Johnson & Johnson stock versus the entire universe of Value Line stocks; when the Relative Strength Price line is rising, it means a stock is acting better than the universe. When it is falling, a stock is doing worse than the Value Line universe.

At the very bottom of the chart, we show volume of trading each month (item 14) as a percent of total shares outstanding. The Legends box (item 2) in the upper left of the price chart contains, among other things, information on the "cash flow" multiple, a record of stock splits, and whether or not there are options traded.

The Target Price Range (item 11) in the upper right corner of the price chart indicates where Value Line's analyst believes the stock is most likely to be selling in the 2007-09 period. This box should be viewed in conjunction with the Projections box (item 29) near the top left-hand corner of the page, which also gives our 3- to 5-year projections. For Johnson & Johnson, we expect the average price to hover between 80 and 100, which would be moderately above the current level.

Just above the 2007-09 PROJECTIONS box is a section containing the Value Line Timeliness, Safety, and Technical ranks, plus a Beta calculation. Johnson & Johnson's Beta of .65 reveals that this stock is likely to move up and down much more slowly than the typical stock on the New York Stock Exchange. If you think that the stock market will go up, you want to invest in stocks
with high Betas. If you think the market will go down or are looking for stability, a stock like Johnson & Johnson, with a low Beta is the place to be.

The “Cash Flow” Line

The price chart at the top of the Johnson & Johnson page contains, among other things, a monthly price history for the stock (the vertical bars) overlaid by a solid line that we call the “cash flow” line (sometimes also called the “Value Line”). To plot the line, we multiply cash flow per share (net income plus depreciation and amortization divided by the number of shares outstanding at the end of the year) by a number (multiple) determined by our analyst. The goal is to create a “line” that most closely matches a company’s stock price history and also “fits” the projected 3- to 5-year Target Price Range. In the case of Johnson & Johnson, the “cash flow” multiple is now 15. (The multiple can, and often does, change over time.)

The concept of a “cash flow” multiple is not too different from that for a Price/Earnings multiple (or ratio). The difference here is that instead of dividing the recent price of a stock by 12 months of earnings to create a P/E multiple, we divide the recent price by the total of 12 months of earnings plus 12 months of depreciation (and amortization, if there is any).

There is evidence that some stocks will generally trade at a price close to the “cash flow” line. In those cases when a stock is trading above the “cash flow” line, it will often move back down toward the “cash flow” line. When it is trading below, it will often do the opposite. In some cases, a stock may trade above or below the “cash flow” line for considerable periods of time.

Historical Results and Estimates

For each of the approximately 1,700 companies Value Line follows, we usually present per-share data going back 17 years in the Statistical Array in the center of each report. The historical data (item 26) appear on the left side and are presented in regular type. We also project statistical data (item 15) for the next fiscal year, as well as three to five years into the future. These projections are presented in bold italics.

Now look at a list of items in the Statistical Array (items 15 and 26).
Capital Spending per share (fifth line) is the amount that a company spends on new plant and equipment. It doesn't include funds used for acquisitions of other companies.

Book Value per share (sixth line) is common shareholder's equity determined on a per-share basis. It includes both tangible assets, like plant and receivables and inventories, as well as intangibles, like the value of patents or brand names, known as "goodwill." Any significant intangibles will normally be indicated in a footnote. If all assets could be liquidated at the value stated on the company's books, all liabilities such as accounts payable, taxes, and long-term debt paid, and all preferred stockholders compensated, the book value is what would be left for the common stockholders.

The number of Common Shares Outstanding (seventh line) is also listed in the Statistical Array. Sometimes net income rises, but earnings per share do not, because the number of shares outstanding has increased. This may happen because a company is issuing stock to pay for acquisitions or to fund internal growth. As a result, sales and profits may soar, while per-share sales and earnings lag. On the other hand, when cash-rich companies buy their own shares, earnings per share can rise even if net income is stable. Johnson & Johnson's share base has grown slightly in the past ten years.

The Average Annual P/E Ratio (eighth line) shows what multiple of earnings investors have been willing to pay for a stock in the past and the P/E ratio the analyst expects out 3 to 5 years. Johnson & Johnson's average annual P/E has frequently been very high in recent years, and Value Line's analyst projects that it will be above average in the years through 2007-09.

The Relative P/E Ratio (ninth line) shows how the stock's price-earnings ratio relates to those of all stocks in the Value Line universe. Johnson & Johnson's relative P/E of 1.09 is 9% higher than that of the typical stock. However, its relative PE has often been even higher, and the Value Line analyst thinks it will be high again in the period to 2007-09.

The Average Annual Dividend Yield (tenth line) is of special interest to conservative investors, many of whom are more concerned with income than with a stock's appreciation potential. Income-oriented investors should look for stocks with yields that are higher than the average shown each week in the center box of the front cover of the Summary & Index, but they should also look at the trend of dividends over time. Johnson & Johnson's dividend has been increased in each year shown on our page, and the analyst thinks it will continue to rise. Steady increases are very attractive for many investors. Investors should also look carefully at a company's Financial Strength to make certain that the company will be able to continue to pay the dividend. A good rule of thumb for conservative investors is to invest only in companies with Financial Strength ratings of at least B+

Company Financial Data

The Sales figure (eleventh line) is the most common measure given when referring to a company's size. Johnson & Johnson's sales in 2004 are expected to be more than 2.9 times the amount recorded in 1994, a very strong performance.

The Operating Margin (twelfth line) indicates what percentage of sales is being converted into operating income. (Operating income is total sales minus the cost of goods sold and selling, general and administrative expenses. It is also referred to as EBITDA, or earnings before interest, taxes, depreciation, and amortization.) At Johnson & Johnson, the past decade has seen a rise in this figure, and the figure is expected to widen slightly more in the next 3 to 5 years.

Depreciation (thirteenth line) shows the amount charged against operating profits to reflect the aging of a company's plant and equipment. That number has risen quite steadily and is expected to continue to rise through 2007-09.

Net Profit (fourteenth line) is the amount the company earned after all expenses including taxes, but excluding nonrecurring gains or losses and the results of discontinued operations. Usually, the higher the net, the higher the per-share earnings. Johnson & Johnson's net profit has grown considerably since 1994, and has risen in every year.

Johnson & Johnson's Income Tax Rate (fifteenth line) has been in the 27% to 30% range for many years, and Value Line's analyst thinks it will stay there in the future. Income tax rates will normally remain steady unless the federal tax rate changes in the U.S. or unless a company increases or decreases the percentage of business it does overseas, where tax rates are different.
Net Profit Margin (sixteenth line) shows net income after taxes as a percentage of sales (or revenues). Here, the trend is the most important thing, with rising margins usually being favorable. It is often worthwhile to compare the net margin with the operating margin. Usually the two series move together, though not always. Depreciation charges, interest expense, income taxes, and other costs are deducted from (and other income added to) operating income in the determination of net profit. Where there is a disparity in the trends of the net and operating margins, it may be worth taking a second look. (If depreciation, interest charges, or tax rates move sharply in any direction, there will be an impact on net profits, and it would be worthwhile to try to determine why the change occurred.)

Johnson & Johnson’s Net Profit Margin has been at record levels in recent years, and we expect the current high level to hold over the next 3 to 5 years.

Working Capital (seventeenth line), the company’s current assets less current liabilities, indicates the liquid assets available for running the business on a day-to-day basis. The higher a company’s sales, the more working capital it typically has and needs. But we caution that a number of large companies with steady revenue streams no longer believe large amounts of working capital are necessary. In those cases, a negative working capital may be perfectly acceptable because a company can meet normal operating expenses from consistent cash receipts.

Long-term Debt (eighteenth line) is the total debt due more than one year in the future. In the case of Johnson & Johnson, the amount is quite low relative to shareholder’s equity.

Shareholders’ Equity (nineteenth line), also known as net worth, is the total stockholders’ interest (preferred and common) in the company after all liabilities have been deducted from the company’s total assets. All intangible assets such as goodwill, patents, and, sometimes, deferred charges are included in shareholders’ equity. Johnson & Johnson’s equity has grown appreciably over the years, primarily from retained earnings.

Return on Total Capital (twentieth line) measures the percentage a company earns on its shareholders’ equity and long-term debt obligations. When a company’s return on total capital goes up, there should also be an increase in the return on shareholders’ equity (see below). If not, it simply means that the company is borrowing more and paying interest, but not earning more for the stockholders on their equity in the company’s assets. Unless a company can earn more than the interest cost of its debt over time, the risk of borrowing is not worthwhile.

Return on Shareholders’ Equity (twenty-first line) reveals how much has been earned (in percentage terms) every year for the stockholders (common and preferred). Higher figures are usually desirable, often indicating greater productivity and efficiency. Johnson & Johnson’s percent earned on net worth has been relatively high in recent years, and while it may slip in coming years, it is likely to remain above average.

Trends in both this ratio and the return on total capital—two key gauges of corporate performance—say a great deal about the skill of management.

Retained to Common Equity (twenty-second line) also known as the “plowback ratio,” is net income less all dividends (common and preferred), divided by common shareholders’ equity and is expressed as a percentage. It measures the extent to which a company has internally generated resources to invest for future growth. A high plowback ratio and rapidly growing book value are positive investment characteristics.

All Dividends to Net Profit, or “payout ratio,” (twenty-third line) measures the proportion of a company’s profits that is distributed as dividends to all shareholders—both common and preferred. Young, fast-growing firms reinvest most of their profits internally. Mature firms are better able to pay out a larger share of earnings. Johnson & Johnson has been paying out 34% to 38% of its profits in the form of cash dividends. By way of comparison, the typical large company in the Value Line universe usually pays out about 25% of its profits in dividends.
1. **Value Line's Ranks**—the rank for Timeliness; the rank for Safety; the Technical rank. Beta, the stock's sensitivity to fluctuations of the market as a whole, is included in this box but is not a rank. (See Glossary for Industry rank.)

2. **The Legends box** contains the “cash flow” multiple, the amounts and dates of recent stock splits and an indication if options on the stock are traded.

3. **Monthly price ranges of the stock**—plotted on a ratio (logarithmic) grid to show percentage changes in true proportion. For example, a ratio chart equalizes the move of a $10 stock that rises to $11 with that of a $100 stock that rises to $110. Both have advanced 10% and over the same space on a ratio grid.

4. **The “cash flow” line**—reported earnings plus depreciation (“cash flow”) multiplied by a number selected to correlate the stock’s 3- to 5-year projected target price, with “cash flow” projected out to 2005.

5. **Recent price**—see page 2 of the Summary & Index for the date, just under “Index to Stocks.”

6. **P/E ratio**—the recent price divided by the latest six months’ earnings per share plus earnings estimated for the next six months.

7. **Trailing and median P/E**—the first is the recent price divided by the sum of reported earnings for the past 4 quarters; the second is an average of the price/earnings ratios over the past 10 years.

8. **Relative P/E ratio**—the stock’s current P/E divided by the median P/E for all stocks under Value Line review.

9. **The stock’s highest and lowest price of the year.**

10. **Dividend yield**—cash dividends estimated to be declared in the next 12 months divided by the recent price.

11. **Target Price Range**—the range in which a stock price is likely to trade in the years 2007-09. Also shown in the “Projections” box on the left.

12. **Relative Price Strength** describes the stock’s past price performance relative to the Value Line Arithmetic Composite Average of approximately 1,700 stocks. (A rising line indicates the stock price has been rising more than the Value Line universe.)

13. **The % Total Return** shows the price appreciation and dividends of a stock and the Value Line Arithmetic Composite Index for the past 1, 3, and 5 years.

14. **The percent of shares traded monthly**—the number of shares traded each month as a% of the total outstanding.

15. **Statistical Array**—Value Line estimates appearing in the area on the right side are in bold italics.

16. **Business Data**—a brief description of the company’s business and major products along, with other important data.

17. **Analyst’s Commentary**—an approximately 350-word report on recent developments and prospects—issued every three months on a preset schedule.

18. **The expected date of receipt by subscribers**. The Survey is mailed on a schedule that aims for delivery to every subscriber on Friday afternoon.

19. **Value Line’s Indexes** of Financial Strength, Stock’s Price Stability, Price Growth Persistence, and Earnings Predictability. (See Glossary for definitions.)

20. **Footnotes** explain a number of things, such as the way earnings are reported, whether basic or diluted.

21. **Quarterly dividends paid** are actual payments. The total of dividends paid in four quarters may not equal the figure shown in the annual series on dividends declared in the Statistical Array. (Sometimes a dividend declared at the end of the year will be paid in the first quarter of the following year.)

22. **Quarterly sales** are shown on a gross basis. Quarterly earnings on a per-share basis (estimates in bold type).

23. **Annual rates of change** (on a compound per-share basis). Actual for each of the past 5 and 10 years, estimated for the next 3 to 5 years.

24. **Current position**—total current assets and total current liabilities, and their detail.

25. **The capital structure** as of the indicated recent date showing, among other things, the $ amount and % of capital in long-term debt and preferred stock. We also show the number of times that interest charges were earned.


27. **Stock purchases/sales by institutions**—the number of times institutions with more than $100 million of assets under management bought or sold stock during the past three quarters and the total number of shares held by those institutions at the end of each quarter.

28. **The record of insider decisions**—the number of times officers and directors bought or sold stock or exercised options during the past nine months.

29. **The projected stock price** in 2007-09. Also, the total expected % gain/loss before dividends and the Annual Total Return (% including dividends).
### Johnson & Johnson

**BUSINESS:** Johnson & Johnson manufactures and sells health care products, major businesses, with pharmaceuticals, drugs. 2003 sales (operating income) by segment: Pharm., 47% (60%); Med. Device & Diag., 35% (28%); Consumer, 18% (12%).

**In 2004:** added 1.2 percentage points to mix, meantime, along with cost-cutting initiatives, added 1.2 percentage points to mix.

**Quarterly Dividends Paid**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Date</th>
<th>Div. per Share (c)</th>
<th>Dividend Ex-Div.</th>
<th>Record Date</th>
<th>Payment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 15</td>
<td>19.00</td>
<td>0.76</td>
<td>0.73</td>
<td>1 Jan 15</td>
<td>15 Jan 15</td>
</tr>
<tr>
<td>Apr 15</td>
<td>19.00</td>
<td>0.62</td>
<td>0.59</td>
<td>1 Apr 15</td>
<td>15 Apr 15</td>
</tr>
<tr>
<td>Jul 15</td>
<td>19.00</td>
<td>3.03</td>
<td>3.00</td>
<td>1 Jul 15</td>
<td>15 Jul 15</td>
</tr>
<tr>
<td>Oct 15</td>
<td>19.00</td>
<td>1.40</td>
<td>1.37</td>
<td>1 Oct 15</td>
<td>15 Oct 15</td>
</tr>
</tbody>
</table>

**Top-line contributions from an other key growth driver, Cypher (drug eluting stent), is also being squeezed other key growth driver, Cypher (drug eluting stent), is also being squeezed.

**March quarter, the company beat our $0.82 bottom-line estimate by a penny, with net rising 20%. It exceeded our figure by $0.02 (and consensus by $0.03) in the second period, posting a 17% year-over-year increase. Revenues were up 11.3% in the most recent quarter, 8.5% on a constant currency basis. Significantly, too, sales growth was solid across all three major businesses, with pharmaceuticals, medical devices and diagnostics, and consumer expanding by 13.1% (to $5.4 billion), 11.8% ($4.1 billion), and 10.0% ($2.0 billion), respectively.

**Target Price Range 2007-2008**

<table>
<thead>
<tr>
<th>Year</th>
<th>Target Price (1)</th>
<th>Target Price (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>55.00</td>
<td>60.00</td>
</tr>
<tr>
<td>2008</td>
<td>57.00</td>
<td>62.00</td>
</tr>
</tbody>
</table>

**In conclusion:** The healthcare products giant has about $13 billion in cash. As well, it generates some $6 billion annually in free cash flow. Thus, management has ample financial flexibility with which to transfigure the company’s growth profile. Major acquisitions and stock repurchases are clearly viable options. J&J stock is timely for the year ahead. Moreover, it also offers good Risk-adjusted, 3-to-5-year total-return potential.
6

THE VALUE LINE INDUSTRY REPORT

All the company reports in The Value Line Investment Survey are grouped by industry, and at the front of each industry group is a one- or two-page Industry Report.

The information contained in each Industry Report may differ considerably from one industry to another, but there is a general format we follow.

The number of industries followed in The Value Line Investment Survey is constantly changing. As companies drop out, usually because of mergers or acquisitions, we may discontinue an industry. On the other hand, as new industries develop, we add them. Some we have added in the past two years are Biotechnology, Human Resources, Entertainment Technology, and Coal.

Analytical Commentary

Much of each page contains analytical commentary. The text in each report is written by a Value Line security analyst, who normally also follows a number (sometimes as many as 10 or 12) of the companies in the industry.

The text normally includes comments about important developments in the industry and the impact those developments have been having on the companies. It also usually includes the analyst's projections about the immediate and longer-term prospects for the industry. We always recommend that you read this report to get an idea of just what an analyst thinks about an industry.

Composite Statistics

In the lower left corner of most reports is a table of Composite Statistics for an industry. The statistics are compiled from the data on the individual companies; the individual data headings are the same as those on the company pages.

Composite Statistics: Medical Supplies Industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (mill)</th>
<th>Operating Margin</th>
<th>Net Profit (mill)</th>
<th>Net Profit Margin</th>
<th>Income Tax Rate</th>
<th>Retained to Com Eq</th>
<th>Dividend Payouts</th>
<th>Avg Ann'l Div'd Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>164858</td>
<td>16.1%</td>
<td>291038</td>
<td>1.79</td>
<td>9.5%</td>
<td>25%</td>
<td>28%</td>
<td>9.5%</td>
</tr>
<tr>
<td>2001</td>
<td>201055</td>
<td>15.1%</td>
<td>312500</td>
<td>1.15</td>
<td>30%</td>
<td>26%</td>
<td>20%</td>
<td>1.6%</td>
</tr>
<tr>
<td>2002</td>
<td>248444</td>
<td>14.5%</td>
<td>327645</td>
<td>1.33</td>
<td>9%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2003</td>
<td>268645</td>
<td>15.2%</td>
<td>348344</td>
<td>1.25</td>
<td>9.1%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2004</td>
<td>290133</td>
<td>15.5%</td>
<td>368645</td>
<td>1.27</td>
<td>9.6%</td>
<td>26%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2005</td>
<td>312500</td>
<td>15.5%</td>
<td>3382700</td>
<td>1.25</td>
<td>9.5%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2006</td>
<td>368645</td>
<td>15.5%</td>
<td>368645</td>
<td>1.25</td>
<td>9.5%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2007</td>
<td>3382700</td>
<td>15.5%</td>
<td>368645</td>
<td>1.25</td>
<td>9.5%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2008</td>
<td>368645</td>
<td>15.5%</td>
<td>368645</td>
<td>1.25</td>
<td>9.5%</td>
<td>25%</td>
<td>28%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

*Bold figures are Value Line estimates.*

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These statistics have two primary uses. First, they help an investor examine trends in an industry. Second, they provide a benchmark for comparisons. An investor can look at the statistics on an individual company page and compare them with those of the industry to see how a company stacks up with its industry. He/she can also compare one industry with another.

**Industry Trends**

When purchasing a stock in a company, an investor should also know something about the industry in which a company is operating. Some important questions are:

- Is the industry growing?
- Are the industry's operating and profit margins growing or at least remaining steady?
- Are the industry's returns on total capital and shareholders' equity growing or at least remaining steady?

The answer to these questions can be found in the Composite Statistics table. In most cases, if an industry's trends are favorable, the operating conditions for the companies in that industry will also be favorable. If the industry trends are negative, the opposite may be true.

**Company/Industry Comparisons**

When you are investing in a company, you should also know how that company is performing relative to its industry. A company's size and operating performance are both very important, and you should study them by looking at our individual company pages. However, you should also know if a company is well run. Some questions an investor should ask are:

- How do a company's operating margins compare with the industry's operating margins?
- How do a company's net profit margins compare with the industry's margins?
- Are a company's returns on total capital and on shareholders' equity greater or smaller than those of the industry?

If a company's margins and returns are above average, the company is probably efficiently run. If the margins and returns are lower than most firms in the industry, the company is probably not being run as well as it could be.

**WARNING!** Many industries are dominated by one or two companies. When that is the case, company/industry comparisons may not be very useful. Examples here are Anheuser-Busch, which accounts for more than half the sales in our Alcoholic Beverage Industry, and Dow Chemical and Dupont, which together have more than 80% of the sales of our Basic Chemical Industry. Be careful when making company/industry comparisons to make certain the comparisons are meaningful.

**Industry Timeliness**

At the top right of each report, we publish an INDUSTRY TIMELINESS rank. These go from 1 (highest) to 98 (lowest).

The Industry Timeliness ranks are calculated by averaging the Timeliness ranks of each of the stocks in a particular industry. If an industry has a large number of stocks ranked 1, the Industry Timeliness rank is likely to be high. If an industry has a large number of stocks ranked 5, the Industry rank is likely to be low.

The Industry ranks are updated weekly and published on the front and inside pages of the Summary & Index. You should always look in the Summary & Index to make certain you have the most recent numbers.

**Relative Strength Chart**

In the lower right corner of most reports is a relative strength chart going back for as many as seven years. Relative strength compares the price of a stock over time with the price of the stock market over the same time. (In this case, we use the Value Line Composite Index of approximately 1,700 stocks to represent the market.) When the relative strength line is rising, it means that the stocks in an industry are stronger than the broad market. When the line is falling, the stocks in an industry are weaker than the broad market.
Long-term subscribers to *The Value Line Investment Survey* are often well aware of the basic tenets of investing and the many ways information can be used in *The Value Line Investment Survey*. However, they and many newer readers often have questions about material in the publication. Below are answers to those questions we receive most frequently.

**Timeliness Ranks**

How do you determine the Timeliness rank, and what makes it change?

Value Line’s Timeliness Ranking System ranks all of the approximately 1,700 stocks in our universe for relative price performance in the coming six to 12 months. At any one time, 100 stocks are ranked 1; 300 are ranked 2; approximately 900 are ranked 3; 300 are ranked 4; and 100 are ranked 5. In simple terms, Timeliness ranks [which go from 1 (Highest) to 5 (Lowest)] are determined by a company’s earnings growth and its stock’s price performance over a 10 year period. A rank may change under three circumstances. The first is the release of a company’s earnings report. A company that reports earnings that are good relative to those of other companies and good relative to the numbers we had expected may have its stock move up in rank, while a company reporting poor earnings could see its stock’s rank drop.

A change in the price of a stock can also cause a stock’s rank to change. A change in price carries less weight than a change in earnings, but it is still an important determinant. Generally speaking, strong relative price performance is a plus, while negative relative price performance (relative to all other approximately 1,700 stocks) is a minus.

And finally, there is the “Dynamism of the Ranking System.” This phrase means that a stock’s rank can change even if a company’s earnings and stock price remain the same. That’s because a fixed number of stocks is always ranked 1, 2, etc. Every time one stock’s Timeliness rank moves up or down, another’s must also change. As an example, let’s suppose one company reports unusually good earnings, causing its stock’s Timeliness rank to rise from 2 to 1. Since there can be only 100 stocks ranked 1, some other stock must fall to a rank of 2, even though there has been no change in its earnings or price.

Can you tell me where a particular stock ranks within its class (a high 1, a low 1, etc.)?

We do not disclose this information. However, we do list the date when a rank last changed and what the direction of the change was. Next to the Timeliness rank
on each company page you can see when the last change occurred and whether it was raised or lowered. Changes are also indicated each week in the Summary & Index by an arrow next to Timeliness ranks.

I think that Value Line should change a certain stock's rank. Will you do it?

We appreciate your interest, but all ranks are generated by computer driven criteria and historical data. Value Line methodology keeps our System objective and unbiased, because the same criteria apply to all stocks.

Would you tell me the formula you use to calculate ranks?

The details of the formula are proprietary. The components of the Timeliness Ranking System, as mentioned earlier, include the long-term trend of earnings and stock prices, recent company earnings and stock price performance, and a comparison of the latest quarterly earnings with those that had been expected. (Better than expected earnings are normally positive, less than expected earnings, negative.) We cannot be more specific than that.

Why do stocks with Timeliness ranks of 1 or 2 sometimes have below-average, long-term appreciation potential, and vice versa?

Probable the most important thing for all readers to know is that the time horizons for Timeliness ranks and for 3- to 5-year Projections are very different. Our Timeliness ranks are for the relative performance of stocks over the coming six to 12 months. Our forecast for long-term price potential is for 3 to 5 years. Because of the very different time periods, our forecasts for the two periods can be very different.

To provide a more specific answer, stocks ranked 1 or 2 for Timeliness often have been moving higher and often sell at high price/earnings ratios. While we think these stocks will continue to outperform other stocks in the Value Line universe during the next six to 12 months, it is unrealistic to think a stock’s price will keep moving up forever. At some point, earnings growth is likely to slow, at least somewhat, and our analysts try to be as realistic as possible in calculating the 3- to 5-year projections. If earnings growth slows in the future, a stock’s price/earnings ratio is likely to narrow, limiting the potential for appreciation in the stock's price.

Why do some stocks not have a Timeliness rank?

Our computer-generated Timeliness ranks require at least two years of income statement and stock price history. If a stock has been trading for less than two years, possibly because a company is relatively new or because there was a major spinoff or acquisition, we are unable to assign a rank to it. We also suspend Timeliness ranks for unusual developments such as a merger offer or a bankruptcy filing.

TECHNICAL RANK

What exactly is the Technical rank?

The Technical rank uses a stock’s price performance over the past year to attempt to predict short-term (three to six month) future returns. Each stock in our 1,700-company universe is ranked in relation to all others on a scale of 1 (Highest) to 5 (Lowest). There are no other factors incorporated into the model. While our Technical rank does contribute to investment decisions, we would like to stress that our primary investment advice is based on our successful time-proven Timeliness Ranking System. The Technical rank is best used as a secondary investment criterion.

EARNINGS

Why does Value Line sometimes show different share earnings than those in a company’s annual report, or in The Wall Street Journal, or in a brokerage house report?

We each calculate earnings differently. In particular, Value Line excludes what we consider to be unusual or one-time gains or charges in order to show what we consider to be “normal” earnings.

Company earnings often contain one-time non-recurring or unusual items, such as expenses related to the early retirement of debt, a change in accounting principles, restructuring charges, or a gain or loss on the sale of assets. In order to make a reasonable comparison of core operating results from one year to the next—or from one company to another—it is necessary to exclude these items from reported earnings. Some items are relatively easy to take out because they are explicitly shown in the company’s income statement and footnotes. Others, however, must be estimated by our analysts. Any unusual adjustments to reported earnings will be disclosed in the footnotes of each Value Line report.
OPERATING MARGIN

What is an operating margin?

The operating margin shows operating income (earnings before the deduction of depreciation, amortization, interest, and income taxes) as a percentage of sales or revenues. Operating income is sometimes referred to as EBITDA.

PRICE/EARNINGS RATIO

Why does the Value Line price/earnings ratio often differ from that in The Wall Street Journal or brokerage reports?

All price/earnings ratios are calculated by dividing the recent stock price by 12 months of earnings. The different ratios occur because we each use different 12-months earnings figures. Newspapers use 12-months trailing (i.e., reported) earnings. Value Line uses a total of the past six months of trailing earnings and the next six months of estimated earnings. (In our view, this is the best method since it incorporates both recent history and a near-term forecast.) Your broker is likely to use a calendar year’s earnings. While we think our method is best, none is wrong. Just be sure that when you are comparing two companies’ P/E ratios, you are using the same methods.

For additional information on P/E ratios, please turn to page 15.

ABBREVIATIONS

I have trouble understanding some of your abbreviations. Can you help me?

Yes. Most of the frequently used abbreviations are included in the Glossary at the end of this guide.

SELECTION & OPINION MODEL PORTFOLIOS

How are stocks chosen for the Model Portfolios I, II and III in Selection & Opinion?

Each portfolio is dedicated to a different investment objective. To guard against near-term underperformance, none of the portfolios can hold a stock that is ranked below 3 (Average) for Timeliness. Timeliness ranks range from 1 (Highest) to 5 (Lowest). To make it more attractive and useful to conservative investors, Portfolio II must hold stocks that are ranked at least 3 (Average) for Safety.

Portfolio I, Stocks with Above-Average Year-Ahead Price Potential, is built on Value Line’s well-respected Timeliness Ranking System. It is primarily suitable for investors who wish to take more risk in hopes of greater returns than might be afforded in Portfolios II or III. To qualify for purchase, stocks have to be ranked 1 (Highest) for Timeliness. To reduce portfolio turnover (and recognizing the fact that many good growth stocks go up and down in price along the way), a stock that drops a rank in Timeliness to 2 (Above Average) may remain in the portfolio, assuming that the company’s longer-term fundamentals remain sound. A stock that drops to 3 (Average) for Timeliness must be sold. We attempt to diversify the holdings as much as possible, but note that the Timeliness Ranking System tends to favor high earnings growth and more volatile issues that may cluster in a few industries.

Portfolio II, Stocks for Income and Potential Price Appreciation, attempts to combine our Timeliness Ranking System with an investment objective for above-average income. This portfolio is primarily suitable for more conservative investors. To qualify for purchase, a stock’s yield (the estimated annual dividend for the next 12 months divided by the recent stock price) must be higher than the median yield for all approximately 1,700 stocks Value Line follows. The median is shown on the cover of the Summary & Index each week. The stock must also have a Timeliness rank of at least 3. The higher-than-average yields provide support to the shares in down markets. This portfolio tends to be less volatile because the companies, as a whole, are more likely to be mature and predictable.

Portfolio III, Stocks with Long-Term Price Growth Potential, is based on the fundamental research of our staff of research analysts. This portfolio is suitable for investors with a 3- to 5-year horizon; in terms of risk, it falls somewhere between Portfolios I and II. This portfolio tends to be the most flexible, allowing purchases of a broader array of companies. It is constructed under the principles of modern portfolio theory, which state that the risk of a portfolio should be viewed within the context of a portfolio as a whole, rather than judging the portfolio according to the average rankings of individual securities it holds. To that end, this portfolio is generally well diversified, comprising stocks in a variety of different non-related industries.
The Selected Investments section of Selection & Opinion has three portfolios. Why isn’t there a “Conservative” portfolio?

Portfolio II, Stocks for Income and Potential Price Appreciation, is the one we would recommend for “conservative” investors. A key criterion for this portfolio is that the stocks have above-average dividend yields. These attractive yields lend support to stock prices when the market is declining. This portfolio usually also has slightly lower-than-market risk (volatility) as measured by the average beta of the portfolios.

How have the Model Portfolios done?

We publish the record quarterly in Selection & Opinion, usually three or four weeks after the end of a quarter. We also publish them on our Web site in the section called "About Value Line."

FINANCIAL STRENGTH

What goes into the Financial Strength rating for each individual company?

<table>
<thead>
<tr>
<th>Company's Financial Strength</th>
<th>A++</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock's Price Stability</td>
<td>95</td>
</tr>
<tr>
<td>Price Growth Persistence</td>
<td>90</td>
</tr>
<tr>
<td>Earnings Predictability</td>
<td>100</td>
</tr>
</tbody>
</table>

Financial/Stock Price Data
(Also see item 19, on page 21)

Our Financial Strength rating takes into account a lot of the same information used by the major credit rating agencies. Our analysis focuses on net income, cash flow, the amount of debt outstanding, and the outlook for profits. Other factors also enter into the equation. For example, a company that faces the loss of patent protection on a key product might face a downgrade. The ratings range from A++ (Highest) to C (Lowest), in nine steps, based on the judgment of our senior staff members.

A STOCK'S 3- TO 5-YEAR PRICE PROJECTIONS

How are a stock's 3- to 5-year share-price projections derived?

Our analysts have developed comprehensive spreadsheet models that take into account the current economic climate and a company's operating fundamentals, including recent management initiatives, the actions of the competition, and many other relevant factors for each company. These models are used to develop our earnings and other financial projections for the coming 3 to 5 years.

The Target Price Range is calculated by multiplying a company's estimated earnings per share for the period out 3 to 5 years (in the far right hand column of the statistical array) by the stock’s projected average annual price/earnings ratio for the same period and then developing a range showing the likely high and low price. The width of the band of the share-price projections varies, depending on the Safety rank of the company. Riskier stocks have a wider band, safer stocks a narrow band.

STOCK DECLINES

I bought a stock based on your advice, but it went down. What happened?

As you undoubtedly know, our Timeliness Ranking System has worked extremely well over time. Not all stocks do as we forecast, though, and we have never suggested that they will. What we have strongly recommended is that you diversify your portfolio by purchasing at least six stocks in at least six or more industries. That way, you will protect yourself from unexpected changes in the price of any one stock or any one industry. Also keep in mind that the Value Line Ranking System is relative. In declining markets, group 1 and 2 stocks have historically declined less than the general market. On the other hand, stocks ranked 1 and 2 have outperformed the market during periods when stock prices were rising.

SPEAKING TO ANALYSTS

I would like to speak to the Analyst who wrote a report.

Unfortunately, this isn’t practical. Our staff of approximately 70 analysts has been hired and trained to analyze stocks and write commentaries for The Value Line Investment Survey and, to be fair to all subscribers, they do not have time to provide personalized advice or information.
**PRETAX INCOME**

Where can I find pretax income on a Value Line page?

You can't. We do, however, show net profit after taxes (usually line 14 in the Statistical Array) and the effective tax rate (usually line 15). You can calculate pretax income by dividing net profit by: 1 minus the tax rate. Example: If net profit was $100 million and the tax rate was 36%, pretax profit would be $156.25 million.

\[
\frac{100,000,000}{1.00 - 0.36} = $156,250,000
\]

**ERRORS IN REPORTS**

What should I do if I find an error in a report?

If you think you have found an error in any of our publications, we would very much like to hear from you so that we can correct the mistake. Please write or call us. If you call, let the operator know that you want to report an apparent error, and he/she will connect you with an administrative assistant in the Research Department. Please address your written comments to the office of the Research Director, or e-mail us at VLIS@valueline.com.

If you believe you have found an error in an historical price or per share data item, please read on:

We actually receive very few complaints about our data. Most of those that we do get relate to historical prices and per share data, and the fact is that our stock prices, earnings, and other data are usually correct. When there appears to be a difference in stock prices or earnings per share, it is usually because of a stock split or a stock dividend. Value Line (and everyone else) retroactively adjusts historical stock prices and share data for stock splits and dividends. Splits and dividends of 10% or more are shown in the Legends box in the upper left hand corner of the price chart. Splits of less than 10% are shown in the footnotes.

**INTERNET (WEB) SITE**

Does Value Line have a Web site?

Yes, we do. Our address is www.valueline.com. The Web site includes useful features for today's informed investor.

The Web site is designed to help keep you informed about the stock market and the stocks you are interested in. There is a section where you can get recent stock prices and news on companies you are interested in, and another where you can set up your own portfolios. Three times each day we provide both written and video commentary from our economist and senior portfolio managers. Each afternoon we provide the latest analysis from our security analysts about selective stocks in the news that day. We also archive all issues of The Value Line Investment Survey published in the past three months.

To access some of this data, you must be a subscriber. To enter the "subscriber-only" section, you must enter your user code (your subscriber number on the label of your weekly envelopes) and password ("stocks").

**COMPANY COVERAGE**

Does a company pay to be included in The Value Line Investment Survey?

No. Value Line is not compensated by the companies under our review. This allows us to be totally objective when we analyze companies in The Value Line Investment Survey.

Does the roster of stocks covered by Value Line change?

Yes. Vacancies constantly occur within our approximately 1,700 stock universe. Sometimes a company's earnings will deteriorate to such a degree that we believe investors have lost interest. If that happens, we will discontinue coverage. More frequently, companies leave our universe when they are acquired by or merged with another firm. Acquired or merged companies will be replaced by others. In choosing replacements, we try to select actively traded stocks with broad investor interest.
Why isn’t ABC, Inc., a large well known company, included?

We do try to include companies with actively traded stocks, which have broad public interest. If ABC fits in this category, we will, in all likelihood, provide coverage in the future.

GROWTH RATES
How are the growth rates calculated in the Annual Rates of change box?

We use a compound annual rate that reflects the annual change for various items over the entire period being computed. All rates of change are computed from the average figure for a past 3-year period to an average for a future 3-year period. For more details, see page 14.

<table>
<thead>
<tr>
<th>ANNUAL RATES</th>
<th>Past 10 Yrs.</th>
<th>Past 5 Yrs.</th>
<th>Est’d ’01-’03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>9.0%</td>
<td>7.5%</td>
<td>10.0%</td>
</tr>
<tr>
<td>“Cash Flow”</td>
<td>12.5%</td>
<td>11.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Earnings</td>
<td>13.5%</td>
<td>12.5%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Dividends</td>
<td>13.5%</td>
<td>13.5%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Book Value</td>
<td>14.5%</td>
<td>12.0%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

Annual Rates Box
(Also see item 23, on page 21)
**Glossary**

**Aaa Corporate Bond Rate**— the average yield on corporate bonds rated Aaa by Moody's Investors Service. Bonds that are rated Aaa are judged to be of the best quality compared to all other corporate bonds.

**After-Tax Corporate Profits**— see Corporate Profits.

**AFUDC**— see Allowance for Funds Used During Construction.

**Allowance for Funds Used During Construction** (Electric Utility Industries)— a non cash credit to income consisting of equity and debt components. This non cash income results from construction work in progress and is expected to be converted into cash income at a future date.

**American Depositary Receipts (ADRs)**— since most other nations do not allow stock certificates to leave the country, a foreign company will arrange for a trustee (typically a large bank) to issue ADRs (sometimes called American Depositary Shares, or ADSs) representing the actual, or underlying, shares. Each ADR is equivalent to a specified number of shares (the ratio is shown in a footnote on the Value Line page).

**American Stock Exchange Composite**— a market-capitalization weighted index of the prices of the stocks traded on the American Stock Exchange.

**Amortization**— an accounting method that reduces the value of an asset on a regular basis over time.

**Analyst's Commentary**— an approximate 350-word report on each company page in Ratings & Reports on recent developments and prospects— issued every three months on a preset schedule.

**Annual Change D-J Industrials (Investment Companies)**— the yearly change from year end to year end in the Dow Jones Industrial Average, expressed as a percentage.

**Annual Change in Net Asset Value (Investment Companies)**— the change in percentage terms of the net asset value per share at the end of any given year from what it was at the end of the preceding year, adjusted for any capital gains distributions made during the year.

**Annual Rates of Change (Per Share)**— compound yearly rates of change of per-share sales, cash flow, earnings, dividends, and book value, or other industry-specific, per-share figures, over the past 10 years and five years and estimated for the coming three to five years. Historical rates of change are computed from the average figures for a past three-year period to the most recent actual three-year period. Forecasted rates of change are computed from the average figure for the most recent three-year period to an average for a future three-year period. If data for a three-year period are not available, a two- or one-year base may be used.

**Annual Total Return**— a compound yearly return to shareholders that includes both stock price appreciation and dividend returns.

**Annuity**— a form of contract sold by life insurance companies that guarantees a fixed or variable payment at some future time.

**Arithmetic Average**— a simple mean. Items to be averaged are added and their sum is divided by the number of items. The result is an arithmetic, or simple, average (or mean).

**Asset Quality** (Bank and Thrift Industries)— an indicator of problem loans and other assets relative to total assets. A bank with good asset quality, for example, has a lower percentage of problem loans than the average bank.

**Asset Value Per Share Year End** (Investment Companies)— total common equity at year end, with securities valued at market rather than cost, divided by the number of shares outstanding at year end.

**Assets**— for a corporation, the total of current assets (normally cash and short-term investments, inventories, and receivables) and long-term assets (normally including property and equipment and good will).

**Assets Year End** (Investment Companies)— total investment company assets at market value, including stocks, bonds, government securities, and cash, at year end.

**Available Seat Miles (ASM)** (Air Transport Industry)— a measure of the airline seating capacity available for sale. Each ASM is one seat flown one mile.

**Average Annual Dividend Yield**— dividends declared per share for a year divided by the average annual price of the stock in the same year, expressed as a percentage.

**Average Annual P/E ratio**— is calculated by dividing the average price for a year with the actual reported earnings for that year and is shown in the Statistical Array.

**Average Annual Price Earnings (P/E) Ratio**— the average price of the stock for the year divided by earnings per share (excluding nonrecurring items, as determined by Value Line) reported by the company for the year. In the case of fiscal-year companies, all data are for the fiscal year. (See also Price/Earnings ratio.)
Average Interest Rate Paid (Financial Services Industries)—the interest paid during the year divided by the average debt outstanding.

Average Price for the Year—the sum of the 52 Wednesday closing prices for a stock for the year divided by 52.

Backlog—orders for goods and services that have been received but not yet delivered or rendered.

Balance Sheet—financial statement that lists the assets, debts, and owner’s investment as of a specific date.

Basic Earnings Per Share—net income divided by the weighted average number of common shares outstanding during a period. (This calculation is required by the Financial Accounting Standards Board for all years ending after December 15, 1997.)

Basis Point—in the context of discussions on interest rates, one basis point equals one-hundredth of one percentage point.

Beta—a relative measure of the historical sensitivity of the stock’s price to overall fluctuations in the New York Stock Exchange Composite Index. A Beta of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The “Beta coefficient” is derived from a regression analysis of the relationship between weekly percentage changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are adjusted for their long-term tendency to converge toward 1.00.

Bond—a long-term debt instrument, characterized typically by fixed, semiannual interest payments and a specified maturity date.

Book Value Per Share—net worth (including intangible assets), less preferred stock at liquidating or redemption value, divided by common shares outstanding.

Business Data—a section on a Value Line company report that describes the company’s most important products, largest shareholders, and includes the company’s address, telephone number, and Internet address.

Capacity at Peak (Electric Utility Industry)—a utility’s generating capability plus purchases from other utilities less sales to other utilities.

Capacity Utilization—the ratio of actual production levels to maximum possible production levels, expressed as a percentage. The Federal Reserve Board publishes capacity utilization figures monthly for both the overall economy and individual industries.

Capital Funds (REIT Industry)—stockholders’ equity (net worth) plus subordinated debt.

Capital Gains Per Share After Tax (Real Estate Industry)—profits derived net of income taxes on the sale of property (either land or buildings) during the year, expressed in terms of the number of common shares outstanding at yearend.

Capital Spending Per Share—the outlays for plant and equipment for the year expressed on a per-share basis. Excludes funds spent for acquisitions.

Capital Structure—a balance sheet item defined by Value Line as the total of a company’s long-term debt, preferred stock at liquidation or redemption value, and its shareholders’ equity.

Capitalization—see Market Capitalization.

Cash Assets—the sum of cash on hand plus short-term securities, such as Treasury bills, that can readily be converted into cash.

"Cash Flow”—the total of net income plus non-cash charges (depreciation, amortization, and depletion) minus preferred dividends (if any). See Free Cash Flow.

"Cash Flow" Line—also known as the “Value Line.” See page 17 for more information.

"Cash Flow" Per Share—net profit plus non-cash charges (depreciation, depletion, and amortization), less preferred dividends (if any), divided by common shares outstanding at yearend.

CD—abbreviation for Certificate of Deposit. See also Time Deposits.

Certificate of Deposit—see Time Deposits.

Closed-End Investment Company (or Fund)—a company or fund that has a relatively fixed number of shares (hence the term “closed-end”) that are bought or sold through broker/dealers on the stock exchange. In contrast, an open-end (or mutual) fund stands ready (continuously) to redeem shares for cash or issue new shares for cash and, hence, deals directly with its investors.

Combined Ratio (Insurance [Property/Casualty] Industry)—the percentage of losses to premiums earned plus the percentage of expenses to premiums written. The break-even point is 100%; in other words, a combined ratio of less than 100% represents an underwriting profit and a combined ratio of more than 100% represents an underwriting loss.

Common Equity Ratio—shareholder’s equity divided by total capital (i.e., long-term debt, preferred equity, and common equity).

Common Shares Outstanding—the number of shares of common stock actually outstanding at the end of a company’s accounting year. This total excludes any
shares held in the company's treasury. The figures for common shares outstanding in previous years are fully adjusted for all subsequent stock splits and stock dividends.

**Common Stock to Surplus** (Insurance Industries)—the market value of the common stock held in the insurance company's investment portfolio divided by statutory net worth.

**Compound Growth**—the annual rate of growth of an investment when dividends or interest are reinvested.

**Consumer Price Index**—a Labor Department index, published monthly, designed to reflect changes in the cost of living. Housing, food, beverage, and transportation costs account for about 80% of the value of the index, which is a measure of inflation at the consumer level.

**Conversion Price**—the effective price paid for common stock when the stock is obtained by converting either convertible preferred stock or convertible bonds or debentures. For example, if a $1,000 bond is convertible into 20 shares of stock, the conversion price is $50, that is, $1,000 divided by 20.

**Convertible Debentures**—long-term debt instruments, not secured with collateral, that may be converted into a specified number of shares of common stock.

**Convertible Preferred Stock**—preferred stock that may be converted into a specified number of shares of common stock.

**Corporate Profits**—the aggregate of all profits for U.S. corporations reported by the Commerce Department as part of the domestic income and product (GDP) accounts. Reported both on a pretax and aftertax basis. They are somewhat different from profits reported to shareholders and profits reported for tax purposes.

**Current Assets**—assets that may reasonably be expected to be converted into cash, sold, or consumed during the normal operating cycle of a business, usually 12 months or less. Current assets usually include cash, receivables, and inventories.

**Current Liabilities**—financial obligations that will have to be satisfied within the next 12 months. Current liabilities include accounts payable, taxes, wage accruals, and total short-term debt, or Debt Due (the sum of notes payable and the portion of long-term debt maturing in the operating year).

**Current Position**—the component of a company's working capital are presented in this table in Value Line reviews on industrial companies. The difference between current assets and current liabilities is known as Working Capital.
**Earned Surplus**—a payout to shareholders determined by a Board of Directors.

**Dividend Yield**—the year-ahead estimated dividend yield (shown in the top right-hand corner of the Value Line page) is the estimated total of cash dividends to be declared over the next 12 months, divided by the recent price of the stock.

**Dividends Declared Per Share**—the common dividends per share declared (but not necessarily paid) during the company's operating, fiscal year (displayed within the Statistical Array of the Value Line page). See also Dividends Paid Per Share.

**Dividends Paid Per Share**—the common dividends per share paid (but not necessarily declared) during the calendar year (indicated in the quarterly dividend box in the bottom left corner of the Value Line page). See also Dividends Declared Per Share.

**Dow Jones Industrial Average**—a price-weighted average of 30 of the largest U.S. industrial companies, published by Dow Jones & Co.

**Dow Jones Transportation Average**—a price-weighted average of 20 of the largest U.S. transportation companies, published by Dow Jones & Co.

**Dow Jones Utility Average**—a price-weighted average of 15 of the largest U.S. utility companies, published by Dow Jones & Co.

**Downstream (Petroleum [Integrated] Industry)**—the refining and marketing operations of an integrated oil company, as opposed to exploration and production activities (which are referred to as upstream operations).

**Durable Goods**—products used by consumers or businesses that are expected to last three or more years. These goods tend to be big-ticket items (for example, automobiles and washing machines). Durable goods sales are generally interest rate sensitive and correlate with the overall level of economic activity.

**Dynamism**—see page 24.

**Earned Surplus**—see Retained Earnings.

**Earnings**—see Net Profit. A company's total profit before nonrecurring gains or losses, but after all other expenses.

**Earnings Per Share**—net profits attributable to each common share as originally reported by the company, but adjusted for all subsequent stock splits and stock dividends; may be based on weighted average shares outstanding (Basic EPS) or weighted average shares including all shares reserved for conversion of convertible securities (Diluted EPS). Annual and quarterly earnings per share figures on the Value Line page exclude nonrecurring or one-time gains and losses, which are noted in the footnotes.

**Earnings Per Share (Bank Industries)**—net profit after taxes, expressed on a per-share basis as reported by the company. Includes investment securities gains and losses after 1982.

**Earnings Per Share Sensitivity to Change in Loss Ratio (Insurance [Property/Casualty] Industry)**—the degree to which earnings per share will be affected by a one percentage point change in the insurance company's loss ratio.

**Earnings Predictability**—a measure of the reliability of an earnings forecast. Predictability is based upon the stability of year-to-year comparisons, with recent years being weighted more heavily than earlier ones. The most reliable forecasts tend to be those with the highest rating (100); the least reliable, the lowest (5). The earnings stability is derived from the standard deviation of percentage changes in quarterly earnings over an eight-year period. Special adjustments are made for comparisons around zero and from plus to minus.

**Earnings Surprise**—company earnings reports that are significantly better or worse than were forecast.

**Equally Weighted Average**—a stock price index that gives equal weight to each stock regardless of its price or market capitalization. The Value Line indexes are equally weighted averages.

**Equity**—ownership interest held by shareholders in a corporation (essentially the same as stock).

**Equity Offering**—the selling of stock by a corporation.

**Ex-Dividend Date**—the date by which an investor must have purchased a stock in order to receive announced dividends or stock distributions.

**Expense Ratio (Insurance [Property/Casualty] Industry)**—see Percent Expense to Premiums Written.

**Expense Ratio (REIT Industry)**—expenses other than interest, expressed as a percentage of the average assets.

**Expenses/Assets (Investment Companies)**—operating expenses expressed as a percentage of the investment company's total assets at yearend.

**Exports**—the sale of goods and services from one country to another. U.S. exports of goods and services are reported by the Commerce Department in its Gross Domestic Product (GDP) reports.

**Federal Funds**—a market among commercial banks in which banks that need a short-term loan in order to meet regulatory reserve requirements are able to borrow from banks with excess funds. The Federal Funds rate is the interest rate charged on such loans.

**Federal Reserve Board**—the governing body of the Federal Reserve System, which regulates certain banks and is charged with setting national monetary policy.
FH LB Advances (Thrift Industry)—funds borrowed from the regional Federal Home Loan Bank.

Financial Strength Rating—a relative measure of financial strength of the companies reviewed by Value Line. The relative ratings range from A++ (strongest) down to C (weakest), in nine steps.

Financial Times-Stock Exchange 100 (FT-SE 100)—a stock price index made up of 100 of the largest stocks traded on the London Stock Exchange. The index is published by The Financial Times, a London-based financial newspaper.

Finding Cost (Natural Gas [Diversified] and Petroleum Industries)—the amount of money spent per barrel to increase proved reserves through acquisitions, discovery, or enhanced recovery.

Fixed-charge Coverage (Electric Utility Industry)—pretax operating income after depreciation but before other income, interest charges, and Allowance for Funds Used During Construction (AFUDC), divided by long-term plus short-term interest plus twice the preferred dividend. Used as a measure of financial strength for an electric utility. A fixed charge coverage of 100 means that the operating income equals fixed expenses. A figure above 100 means that operating income exceeds fixed expenses, and vice versa.

Free Cash Flow—net income plus depreciation minus the total of dividends, capital expenditures, required debt repayments, and any other scheduled cash outlays.

Full Cost Accounting (Canadian Energy, Natural Gas Diversified, and Petroleum Industries)—a method of accounting under which all costs related to the exploration and development of oil and gas reserves are immediately expensed (a less conservative method than Successful Efforts Accounting).

Fully Diluted Earnings Per Share—earnings per share assuming conversion of all convertible securities plus the exercise of all warrants and options. Similar to Diluted Earnings, which replaced Fully Diluted EPS for all years after December 15, 1997.

Funds Borrowed (Bank Industries)—Federal Funds (free reserves borrowed from other banks), securities sold under Repurchase Agreements (“repos”), commercial paper sold by bank holding companies and non bank subsidiaries, and any other non deposit sources of short-term funds.

GAAP—abbreviation for the Generally Accepted Accounting Principles used by U.S. companies and determined by the Financial Accounting Standards Board (FASB), a private, industry-sponsored organization.

General and Administrative Expenses—expenses such as salaries, rents, advertising, and public relations.

Geometric Average—a geometric average is the nth root of the product of n terms. If n = 3, the geometric average of the three numbers would be the cube (or third) root of the product of the three numbers.

Goodwill—see intangibles.

Government Securities (Bank Industries)—fixed-income debt obligations of the U.S. Government and federal agencies.

Gross Billings (Advertising Industry)—the aggregate outlays for advertising paid by clients to the media. Billings generally serve as a basis for agency commissions.

Gross Dividend Declared per ADR (American Depositary Receipts)—dividends per ADR declared (but not necessarily paid) during the company’s fiscal year before any withholding taxes. For companies based in the United Kingdom, dividends declared are net of the Advance Corporation Tax.

Gross Equipment (Air Transport Industry)—the total of all flight equipment, ground stations, and other property, and all equipment (including property under capital lease) at original cost as reported by the airline company. Does not include advance payments for new equipment.

Gross Income (Financial Services Industry)—the total of interest on receivables, discounts, commissions, service charges, and other revenues.

Gross Income (REIT and Thrift Industries)—all income earned in normal operations excluding nonrecurring items such as gains from property sales.

Gross Income to Interest Ratio (Financial Services Industry)—gross income divided by total interest paid.

Gross Loans (Bank Industries)—total loans outstanding before deductions for loan-loss reserves and unearned income.

Gross Margin—Gross Profit as a % of Sales.

Gross Portfolio Yield (Investment Companies)—gross annual income (before any expenses) divided by total assets at yearend, expressed as a percentage.

Gross Profit (Industrial and Retail Industries)—the income remaining after subtracting the cost of the goods sold. Gross Profit is income before other expenses such as general, selling, and administrative costs, interest, depreciation, and taxes.

Growth Stock—stocks of companies whose earnings grow consistently over time reflecting the fact that such companies have limited sensitivity to the country’s economy as it moves up and down (the opposite of a cyclical stock, which is defined above).
Holding Company—a business that confines its activities to owning stock in and supervising the management of other companies.

Housing Starts—the number of single- and multi-family units for which construction has begun. Published by the Commerce Department.

Imports—a country’s purchases of goods or services from other countries. U.S. imports of goods and services are reported by the Commerce Department when it releases the Gross Domestic Product (GDP) report.

Income Dividends Per Share (Investment Companies)—dividends declared from net investment income on a per-share basis.

Income Statement—a financial report that lists revenues, expenses, and net income throughout a given period.

Income Stocks—stocks with higher-than-average dividend yields. (Often, but not always, stocks with dividends that are considered likely to be maintained or raised.)

Income Taxes—the total of all foreign and domestic (federal, state and city) taxes charged against income.

Income Tax Rate—total income taxes as a % of pretax income.

Industrial Production—a Federal Reserve index, published monthly, of the output of the nation’s factories, mines, and utilities.

Industry Timeliness Rank—the relative timeliness rank of an industry, updated weekly in the Summary & Index and calculated by averaging the Timeliness ranks of each of the stocks assigned a Timeliness rank in the industry. Industries with high Timeliness ranks are those with large percentages of stocks that also have high Timeliness ranks. The rank of each industry is listed on the front cover of Summary & Index, next to the name of the industry.

Initial Public Offering—a corporation’s first equity offering to the public.

Initial Unemployment Insurance Claims—a weekly Labor Department compilation of new unemployment claims based on data from each of the States in the Union and Washington, D.C.

Insider Decisions—the number of decisions to buy or sell a company’s shares made by officers and directors and shown by month for a nine-month period. This table is shown on the left side of the price chart on the Ratings & Reports page. (The source of this information is Vickers Stock Research Corp.)

Institutional Decisions—the number of decisions reported by investment managers having equity assets under management of $100 million or more to buy or sell a company’s shares. This table appears on the left side of the price chart on the Value Line page. (The source of this information is Vickers Stock Research Corp.)

Insurance in Force (Insurance Industries)—the aggregate face amount of all life insurance policies outstanding.

Intangibles—assets such as goodwill (the excess of cost over net assets of companies acquired by purchase), patents, trademarks, unamortized debt discounts, and deferred charges. This figure, if it is material, is footnoted on the Value Line page.

Intangibles Per Share—intangible assets divided by the number of common shares at year end.

Interest—payment for the use of borrowed money. Many companies have both interest charges (for long- and short-term funds they have borrowed) and interest income (for money they have invested, usually in short-term, interest-bearing investments).

Interest Cost to Gross Income (Thrift Industry)—interest expenses for the year, expressed as a percentage of gross income.

Inventories—raw materials, work in progress, and finished products. LIFO (last-in, first-out) accounting minimizes illusory, but taxable, inventory profits in periods of rising prices because high-cost materials are expensed against income first. Under FIFO (first-in, first-out) accounting, the reverse is true. Average cost (middle-in, middle-out) is a compromise between LIFO and FIFO.

Inventory Investment—the change in inventories valued at average prices for the period, as published by the Commerce Department in its periodic Gross Domestic Product reports.

Inventory-to-Sales-Ratio—a ratio of inventories to sales, expressed as a percentage. An excessively high ratio may indicate that businesses have too much inventory on hand and are about to cut back production in order to reduce inventories. A decline in production would slow economic growth.

Inventory Turnover—sales divided by year-end inventory. A measure of the efficiency of inventory management.

Investment Company (or Fund)—a company or fund that invests in other companies (usually through the purchase of equity or debt securities) or invests in commodities or real property, etc., or any combination of the above.

Investment Income (Insurance Industry)—dividends, interest, and rents received on investments and any other investment income less the expenses of the investment department.
**Investment Income Per Share** (Insurance Industry)—dividends, interest, and rents received on investments less the expenses of the investment department, divided by the number of common shares outstanding at year end.

**Large Cap** — a market capitalization (stock price times shares outstanding) of more than $5 billion.

**Leading Economic Indicators**—a monthly Commerce Department index designed to gauge future economic activity.

**Leases**—contractual rentals of plant and equipment. Must be “capitalized” when most of the benefits and obligations of ownership are transferred to the lessee. Capitalizing leases increases long-term debt and gross plant, and depreciation and interest are charged to profits. Uncapitalized-lease accounting enhances the balance sheet, since the financial obligation is not shown.

**Legends Box**—the box at the top of the Price Chart in each full-page report in *The Value Line Investment Survey*. This box is labeled LEGENDS and includes the specific “Cash Flow” per share multiple that will be plotted on the Price Chart and lists stock splits. It also identifies the “Cash Flow” and Relative Price Strength lines that are plotted on the Price Chart.

**Leveraged Buyout**—a corporate takeover, often led by members of management, in which funds are borrowed against company assets in order to pay off existing shareholders. As a result, a publicly held company becomes a highly leveraged, privately held company.

**Life Premium Income** (Insurance Industry)—funds received from policyholders in exchange for promises to make future payments upon (1) death or at a specific date or dates under various forms of life insurance and annuity contracts and/or (2) disability under accident and health contracts.

**Load Factor** (Air Transport Industry)—the percentage of total airline seating capacity that is actually sold and utilized. It is computed by dividing revenue passenger miles flown by available seat miles flown in scheduled service.

**Load Factor** (Electric Utility Industry)—the ratio of the average output in kilowatts supplied during a designated period to the maximum output occurring in that period.

**Loan Loss Experience** (Bank and Thrift Industries)—net loan charge-offs divided by average loans outstanding in a given period.

**Loan Loss Provision** (Bank and Thrift Industries)—funds set aside each quarter in order to cover future possible losses on loans that are not repaid. This figure appears on the bank’s income statement.

**Loan Loss Reserve** (Bank Industries)—reserves set aside at a point in time in order to cover future possible loan losses. This figure appears on the bank’s balance sheet.

**Long-Term Debt**—the portion of borrowings (including bank notes, debentures, and capitalized leases) that will be due not in the current 12 months, but in future operating years.

**Long-Term Interest Earned**—pretax income plus long-term interest expense (including capitalized interest) divided by long-term interest. See Total Interest Coverage.

**Market Capitalization** (Market Cap)—the market value of all common shares outstanding for a company, calculated by multiplying the recent price of a stock by the number of common shares outstanding. Large Cap stocks have market values of more than $5 billion. Mid Cap stocks have market values of from $1 billion to $5 billion. Small Cap stocks have market values of less than $1 billion. (When there are multiple classes of common stock, which often sell at different prices, the number of shares of each class is multiplied by the applicable price.)

**Market-Capitalization Weighted Average**—a stock price index weighted by the value of all shares outstanding for each stock. In such an index, large market capitalization stocks get proportionately more weight than small stocks.

**Median**—the middle value in an ordered series of numbers. As an example, if you ranked a number of stocks in order based on stock price from high to low, the stock price in the middle would be the median.

**Median Price Earnings (P/E) Ratio** (as shown on the top of a Value Line company report)—the average annual P/E ratio of a stock over the past 10 years, with certain statistical adjustments made for unusually low or high ratios.

**Merchandise Trade Balance**—the difference between U.S. exports of goods and U.S. imports of goods. Published monthly by the Commerce Department.

**Mid Cap**—a market capitalization (stock price times shares outstanding) of from $1 billion to $5 billion.

**Money Supply**—Federal Reserve measures of money outstanding. The Federal Reserve is able to influence increases or decreases in the size of the money supply. If money supply grows significantly faster than overall economic growth for an extended period of time, higher rates of inflation often follow. If money supply grows too slowly, economic growth is inhibited.

**NA**—not available; information that was not available when the report went to press.
NASDAQ Composite— a market-capitalization weighted average of approximately 5,000 stocks traded electronically in the NASDAQ market.

Net Asset Value (Investment Companies)— the market value of a company's assets less any liabilities divided by the number of shares outstanding.

Net Income— see Net Profit.

Net Interest Income (Bank and Thrift Industries)— the dollar amount of interest received on loans and other investments, less the dollar amount of interest paid on deposits and other borrowings.

Net Interest Margin (Bank Industries)— the difference between interest rates earned (on loans and other earning assets) and interest rates paid (on deposits and other sources of funds) divided by total value of earning assets.

Net Loan Losses (Bank Industries)— loans written off during a period net of recoveries on loans previously written off. Also referred to as net loan charge-offs and net loan write-offs.

Net Profit (or Income)— a company's total profit before nonrecurring gains or losses, but after all other expenses.

Net Profit Margin— net income before nonrecurring gains and losses as a percentage of sales or revenues.

Net Revenues (Advertising Industry)— total commissions and fees received by the agency.

Net Sales— gross volume less returns, discounts, and allowances.

Net Working Capital— working capital less long-term debt, preferred stock at liquidating value, deferred taxes, minority interests, other long-term liabilities, and intangible assets. Occasionally the phrase is used in a less strict sense to mean working capital less long-term debt. See Working Capital.

Net Worth— all the assets shown on the balance sheet, including any intangible assets (i.e., goodwill, debt discount, deferred charges) less current liabilities, long-term debt, and all other noncurrent liabilities. In other words, the sum of common plus preferred stockholders' equity. Generally referred to as shareholders' equity.

New Loan Volume (Thrift Industry)— the total of loans originated plus loans purchased in a given period by a thrift.

New York Stock Exchange Composite— a market-capitalization weighted average of all the common stocks traded on the New York Stock Exchange.


NMF— not meaningful. Used when a number or ratio is so large or small that it is not meaningful. For example, a price/earnings ratio of 100 would probably not be meaningful because earnings in a particular period were unusually depressed.

Non-Financial Domestic Debt— the sum of U.S. consumer, business, and government borrowings outstanding.

Non-interest Expense (Bank Industries)— expenses other than interest and loan loss provisions, such as wages and overhead.

Non-interest Income (Bank Industries)— income other than interest income, such as trust fees, other fee income, and gains on securities transactions.

Non-performing Assets (Bank and Thrift Industries)— generally includes loans that are not providing, or are not expected to provide, interest income at the contractual rate. Also includes foreclosed properties.

Nonrecurring Items— various unusual gains or losses excluded from reported earnings by Value Line analysts in order to reflect income from ongoing operations. Nonrecurring items are footnoted by year on the Value Line page.

$100 DJI Grew To (Investment Companies)— the amount to which a $100 investment (divided equally) in each of the 30 Dow Jones Industrial Stocks would have grown from year end 1960 (or year in which the company began operations).

$100 Net Assets Grew To (Investment Companies)— the amount to which $100 invested in the net assets of a closed-end fund would have grown from year end 1960 (or after the first year of the company's operation), assuming all capital gains distributions had been reinvested in additional shares.

Operating Earnings— earnings (profits) left after subtracting the cost of goods sold and marketing, general, and administrative costs from sales. Sometimes referred to as EBITDA (earnings before interest, taxes, depreciation, and amortization).

Operating Income— see Operating Earnings.

Operating Margin— operating earnings as a percentage of sales.

Operating Profit— see Operating Earnings.

Option— a contract that gives a buyer the right to buy or sell 100 shares of stock within a certain period of time and at a pre-established price. A call option gives an investor the right to buy 100 shares of stock at a specified price, while a put option allows him to sell 100 shares.

Output Per Hour (Nonfarm)— a Labor Department index of what U.S. non-agricultural workers produce, on average, in an hour. An increase in this index over time is an indicator of productivity gains.
Par Value—the nominal or face value of a stock or bond.

Passenger Yield (Air Transport Industry)—the average revenue per mile paid by each passenger, computed by dividing passenger revenues by revenue passenger miles.

Payout Ratio—see Percent All Dividends to Net-Profit.


Peak Load (Electric Utility Industries)—the greatest demand for power during a specified period of time.

Pension Liability—the total of all unfunded, vested pension benefits that have been accrued.

Percent All Dividends to Net Profit—the sum of all cash dividends (common and preferred) declared, but not necessarily yet paid, for a company’s operating or fiscal year, divided by net profit for that year, expressed as a percentage. Also known as the payout ratio.

Percent Commissions (Securities Brokerage Industry)—income received for execution of trades in commodities, listed securities, NASDAQ transactions, and sales for mutual fund shares as a percentage of total revenues.

Percent Common Stocks (Investment Companies)—the value of common stocks held as a percentage of total assets at year end.

Percent Earned Common Equity—net profit less preferred dividends divided by common equity (i.e., net worth less preferred equity at liquidation or redemption value), expressed as a percentage. See Percent Earned Total Capital.

Percent Earned Shareholders’ Equity—net profit divided by net worth, expressed as a percentage. See Percent Earned Total Capital.

Percent Earned Net Worth (REIT Industry)—net profit divided by average net worth for the year, expressed as a percentage.

Percent Earned Total Assets (Bank and Thrift Industries)—net profit divided by total reported assets, expressed as a percentage.

Percent Earned Total Capital—net profit plus one half the interest charges on long-term debt divided by total capital (i.e., long-term debt plus net worth), expressed as a percentage.

Percent Earned Total Capital (REIT Industry)—net profit plus total interest expense (i.e., the sum of short- and long-term interest outlays) divided by the average total capital (i.e., average total debt plus average net worth), expressed as a percentage. Should be compared to Percent Earned Net Worth to determine the impact of leverage (i.e., use of borrowed capital) to enhance the return to stockholders.

Percent Expense to Premiums Written (Insurance [Property/Casualty] Industry)—underwriting expense (commissions and general and administrative costs) divided by net premiums written less dividends to policyholders, expressed as a percentage. Also called the Expense Ratio.

Percent General & Administrative Expense to Gross Income (Thrift Industry)—expenses such as salaries, rents, and advertising and public relations costs divided by gross income for the year, expressed as a percentage.

Percent Interest Cost to Gross Income (Thrift Industry)—interest expenses for the year divided by gross income for the year expressed as a percentage.

Percent Interest Income (Securities Brokerage) —interest derived from funds loaned to customers' margin accounts plus interest on government and corporate securities held in the company's account, expressed as a percentage of total revenues.

Percent Investment Banking (Securities Brokerage Industry)—fees received for private placements, venture capital financing, real estate activity, mergers and acquisitions, exchange and tender offers, consulting, underwriting, and syndication participation, expressed as a percentage of total revenues.

Percent Investment Income to Total Investments (Insurance [Property/Casualty] Industry)—investment income less associated expense divided by total investments, expressed as a percentage.

Percent Losses to Premiums Earned (Insurance [Property/Casualty] Industry)—losses and loss expenses divided by premiums earned, expressed as a percentage. Also called the Loss Ratio.

Percent Price to Book Value (Insurance Industries)—the average price for the year divided by book value per share, expressed as a percentage.

Percent Principal Transactions (Securities Brokerage Industry)—trading and securities transactions for the firm's own account (e.g., block positioning, market making, and government, municipal, and corporate bond trading out of the company's inventory), expressed as a percentage of total revenues.

Percent Problem Assets to Mortgage Loans—total assets at year end that are problems.

Percent Short-Term Debt to Total Debt (Financial Services Industry)—all debt due in the next 12 months divided by total short- and long-term debt at year-end, expressed as a percentage.
**Per Share Basis**—total Sales, “Cash Flow,” Earnings, or Dividends, and other data divided by the number of shares outstanding. Earnings and dividends are almost always described on a per share basis for ease of understanding.

**Personal Consumption Expenditures**—consumer spending reported monthly by the Commerce Department. Also included in the Gross Domestic Product (GDP) reports.

**Personal Income**—consumer income reported monthly by the Commerce Department. Also included in the Gross Domestic Product (GDP) reports.

**Plant Age**—an estimate derived by dividing accumulated depreciation at the most recent year end by the depreciation allowance in the most recent year.

**Plowback Ratio**—see Retained to Common Equity.

**Policyholders’ Dividends** (Life Insurance Industries)—refunds to the policyholder of part of the premium paid on participation life insurance policies, reflecting the difference between the premium charged and actual mortality experience.

**Policyholders’ Surplus** (Life Insurance Industries)—book value as determined using statutory accounting techniques. Statutory accounting, unlike generally accepted accounting principles (GAAP), does not permit deferral of policy acquisition costs.

**Preference Stock**—see Preferred Stock.

**Preferred Stock**—a security that represents an ownership interest in a corporation and gives its owner a prior claim over common stockholders with regard to dividend payments and any distribution of assets should the firm be liquidated. Preferred stock normally is entitled to dividend payments at a specified rate. These dividends must be paid in full before the payment of a common stock dividend. May or may not have seniority over preference stock (which is akin to preferred stock), depending on state regulations.

**Preferred Stock Ratio**—preferred stock at liquidation or redemption value divided by total capital (i.e., the sum of long-term debt, preferred equity, and common equity), expressed as a percentage.

**Premium Income Per Share** (Insurance Industries)—income to the insurance company consisting of payments made by life, accident and health, disability, and property/casualty insurance policyholders as provided for under the terms of their insurance contracts, divided by the number of common shares outstanding.

**Premium Over Book** (REIT Industry)—the percentage by which the average annual stock price exceeds the average annual book value per share. If the stock sells at a discount from book value, the percentage of that year is preceded by a minus sign.

**Premium Over Net Asset Value** (Investment Companies)—see Dividend From Net Asset Value.

**Premium Written to Surplus** (Insurance [Property/Casualty] Industry)—the total premium received for policies sold during the year divided by legally defined net worth.

**Premiums Earned** (Insurance Industry)—premiums received in advance for insurance protection that will remain in force for a year or more. Premiums accrue to revenues (i.e., are earned) only in proportion to the actual time elapsed under the policy relative to the entire policy term.

**Premiums Written Per Share** (Insurance [Property/Casualty] Industry)—the total premiums received from property/casualty insurance policyholders for policies sold during the year divided by the number of common shares outstanding.

**Present Value**—the amount that, if paid today, would be the equivalent of a future payment, or series of future payments, under specified investment assumptions. If, for example, funds can be invested today to yield 10% annually, a payment of $100 to be made one year hence has a present value of $90.91; that is, $100 divided by 1.10.

**Pretax Corporate Profits**—see Corporate Profits

**Pretax Margin**—profits before federal, state, and foreign income taxes as a percentage of sales or revenues.

**Price Chart**—a graphic historical presentation of the movement of a stock and, often, additional information. The price chart that appears on each Value Line page includes monthly stock price ranges (small vertical lines), a cash flow line (a solid line with projections shown as dashes), and a relative-strength price line (a series of dots).

**Price Earnings Ratio**—probably the most widely used measure of stock valuation. Value Line shows a variety of P/E ratios on every company page, as discussed below: The P/E ratio on the very top of the Value Line page (item 6 on page 21). This is calculated by dividing the recent price of the stock by the total of the last six months earnings and the next six months of estimated earnings.

The Relative P/E Ratio. This compares the P/E of one stock with the median of estimated P/E ratios of all stocks under Value Line review. A relative P/E of more than 1 indicates that a stock’s P/E ratio is currently higher than that of the Value Line universe; a P/E of less than 1 indicates that this stock’s P/E is less than the Value Line average.
A *Trailing* P/E ratio is calculated by dividing the recent price of the stock by the past 12 months of actual (reported) earnings. This is the figure shown in most newspapers.

A *Median* P/E ratio is the average annual P/E ratio of a stock over the past 10 years, with certain statistical adjustments made for unusually low or high ratios.

The *Average Annual* P/E ratio is calculated by dividing the average price for a year with the actual reported earnings for that year and is shown in the Statistical Array.

The *Average Relative Annual* P/E ratio is calculated by dividing the average annual P/E of all stocks under Value Line review.

**Price Growth Persistence**—a measurement of the historic tendency of a stock to show persistent price growth compared to the average stock. Value Line Persistence ratings range from 100 (highest) to 5 (lowest).

**Price-Weighted Average**—a stock price average that gives proportionately more weight to stocks with high share prices than it does to stocks with low prices. The Dow Jones Averages are price-weighted.

**Primary Earnings Per Share**—earnings per share calculated on the assumption of the conversion of certain senior securities (those of the company deemed, according to an accounting formula, to be common stock equivalents—that is, likely to trade like common shares) into common stock. This calculation has not been used since 1997.

**Prime Rate**—the base lending rate reported by the largest commercial banks in the nation.

**Problem Assets (Thrift Industry)**—delinquent loans, loans past due 90 days or more, and foreclosed real estate.

**Producer Price Index (PPI)**—the Department of Labor price indexes of goods categorized by industry and by stage of processing. Widely watched among them are the raw materials, intermediate goods, and finished goods indexes. A measure of inflation.

**Projections Box**—a box appearing in the upper left corner of a Value Line stock page. It includes the absolute price gain expected for the next 3 to 5 years as well as the compound annual return (appreciation plus dividends) during the same period.

**Proved Reserves (Petroleum and Natural Gas/Diversified Industries)**—quantities of natural resources that engineering estimates indicate with reasonable certainty are economically recoverable using present technology.

**Quarterly Earnings**—box appearing at the lower left hand corner of the Value Line Investment Survey page (directly below the quarterly sales box) in which five years of actual and estimated earnings are listed for each of the four quarters of each listed year.

**Quarterly Sales**—box appearing at the lower left hand corner of the Value Line Investment Survey page in which five years of actual and estimated sales are listed for each of the four quarters of each listed year.

**Rate Base (Electric Utility Industry)**—usually the net original cost of plant and equipment; in some instances including an allowance for cash, working capital, materials, and supplies.

**Real**—in the context of economic activity, a measure that excludes the effects of inflation. Real Gross National Product, for example, is a measure of the nation’s output of goods and services, adjusted for inflation.

**Real Estate Investment Trust (REIT)**—a financial intermediary that invests its equity capital and debt in income-producing real estate and mortgages. Under legislation passed in 1961, REITs were granted conduit tax treatment (the same as that permitted mutual funds) under which the part of earnings which flows through to shareholders in the form of dividends is exempt from Federal income taxes at the trust (or corporate) level, provided several conditions are met. Among the conditions for qualification as a REIT under the Internal Revenue Code: At least 95% of otherwise taxable income must be distributed to shareholders in the calendar year earned, and specified percentages of both investments and gross income must be related to real estate.

**Realized Gain or Loss**—profit or loss on the sale of an asset.

**Receivables**—the value of goods and services sold and shipped to customers, for which the company has yet to be paid.

**Receivables (Financial Services Industry)**—the amount of money owed to finance companies by customers at year-end, net of unearned discount (the charges to the borrower) and loss reserves.

**Relative Price-Earnings (P/E) Ratio**—the stock’s current P/E divided by the median P/E for all stocks under Value Line review. (See also Price Earnings Ratio.)

**Relative Strength Price Line**—a representation shown in the price chart on each Value Line page as a series of dots. The line compares the price of a stock with the price of an index (in this case the Value Line Arithmetic Composite) over time. When the line is rising, the stock is acting better than the broad index. When it is falling, the stock is acting worse than the index.

**Reserve Life (Natural Gas [Diversified] and Petroleum Industries)**—a company’s reserves of oil, gas, or other natural resources divided by annual production.
Reserve Replacement Ratio (Natural Gas and Petroleum Industries)—the ratio of reserve additions to production. Reserve replacement is calculated by summing the total reserves added over a five-year period. The ratio is calculated by dividing replacement by production over the same period.

Retail Sales—a monthly measure of all U.S. retail activity, published by the Commerce Department.

Retained Earnings—net profit for the year, less all common and preferred dividends, when relating to the income account. With respect to the balance sheet or common equity, it is the sum of net profit in all years of the company’s existence less all dividends (common and preferred) ever paid. In this case, also known as earnings retained or earned surplus.

Retained to Common Equity—net profit less all common and preferred dividends divided by common equity including intangible assets, expressed as a percentage. Also known as the Plowback Ratio.

Return on Shareholders’ Equity—annual net profit divided by year-end shareholders’ equity.

Return on Total Capital—annual net profit plus 1/2 of annual long-term interest divided by the total of shareholders’ equity and long-term debt.

Revenue—see Sales.

Revenue Passenger Miles (Air Transport Industry)—a measure of airline traffic. Each revenue passenger mile represents one revenue-paying passenger flown one mile.

Revenues (Banks)—this figure has not been used by most banks in the past. However, the combination of net interest income and non-interest income will provide investors with a close approximation.

Revenues (Electric Utility, Natural Gas [Distribution], Telecommunications Industries)—the amounts billed for services rendered.

Revenues (Real Estate Industry)—the total of rental, construction, and interest income and property sales.

Revenues Per Share—gross revenues for the year divided by the number of common shares outstanding at year end.

Safety Rank—a measurement of potential risk associated with individual common stocks. The Safety Rank is computed by averaging two other Value Line indexes—the Price Stability Index and the Financial Strength Rating. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit their purchases to equities ranked 1 (Highest) and 2 (Above Average) for Safety.

Sales—gross volume less returns, discounts, and allowances; net sales.

Sales Per Share—net sales divided by the number of common shares outstanding at year-end.

Savings Deposits Per Share (Thrift Industry)—total savings deposits at year-end divided by the number of common shares outstanding at yearend.

Savings Rate—the personal savings rate, expressed as a percentage of consumer income, published monthly by the Commerce Department.

Seasonally Adjusted—a statistical method of adjusting economic data for seasonal differences in economic activity. For example, monthly retail sales are adjusted for the surge of buying that takes place during the end-of-year holiday season.

Shareholders’ Equity—a balance sheet item showing a company’s net worth. Represents the sum of common and preferred equity including redeemable preferred. Also includes intangibles.

Short-Term Debt—all debt due in the next 12 months and, therefore, considered a current liability. Same as Debt Due. See Total Debt.

Small Cap—a market capitalization (stock price times shares outstanding) of less than $1 billion.

Spot Market—a market in which commodities are purchased or sold and delivered quickly, that is, on the spot.

Standard Deviation—a statistical measure of volatility.

Standard & Poor’s 500—a market-capitalization weighted index of 500 large U.S. common stocks.

Statistical Array—the large statistical section in the center of each Value Line company report in Ratings & Reports. The section contains up to 17 columns of historical information and three columns of estimates on 23 different data items.

Statutory Insurance Accounting (Insurance Industries)—the accounting method required for insurance companies reporting to state insurance regulatory authorities. It is a cash bookkeeping technique, rather than the usual method used in business.

Stock (Common)—units of ownership of a public corporation.

Stock Dividend—the issuance of additional common shares to common stockholders, with no change in total common equity. From an accounting standpoint, retained earnings (i.e., the earned surplus) are reduced and the value of the reported common stock component of common equity (usually called the “par value” account) is increased. (The reduced level of retained earnings is important since bond indentures limit dividend payouts by stipulating minimum levels of retained earnings.) See Stock Split.
Stock (Preferred)—a class of stock that generally has preference over common stock in the payment of dividends and the liquidation of assets and normally pays dividends at a specified rate.

Stock's Price Stability—a relative ranking of the standard deviation of weekly percent changes in the price of a stock over the past five years. The ranks go from 100 for the most stable to 5 for the least stable.

Stock Split—an increase in the number of common shares outstanding by a fixed ratio, say 2-to-1 or 3-to-1, with proportionate allocation of underlying common equity (i.e., the sum of common stock, capital surplus, and retained earnings) and earnings to the increased number of shares outstanding. Total common equity remains the same. From an accounting standpoint, the mix of retained earnings, capital surplus, and common stock remains unchanged. See Stock Dividend. When there is a stock split or dividend, all historical per-share numbers (including past share prices) are adjusted to reflect the new shares outstanding. If, for example, a company's stock traded in a range of 40 to 60 last year and it reported earnings of $2.00 per share, after adjustment for a 2-for-1 stock split, the price range for last year would be 20 to 30 and earnings would be $1.00 a share.

Successful Efforts Accounting (Canadian Energy, Natural Gas [Diversified], and Petroleum Industries)—a method of accounting under which exploratory wells found to be dry are expensed as incurred. See Full Cost Accounting.

Supplementary Report—an update of a regular full-page Value Line company report published in the back of the Ratings & Reports section when there is a significant development relating to a company. Among the most likely reasons for a Supplementary Report are a major corporate development, such as a merger or acquisition, an unexpectedly good or poor earnings announcement, a change in the sales or earnings outlook, an increase or decrease in the Technical Rank, and actual. Stocks ranked 1 (Highest) and 2 (Above Average) are likely to outpace the market during the next quarter or two. Those ranked 4 (Below Average) and 5 (Lowest) are expected to underperform most stocks. Stocks ranked 3 (Average) will probably advance or decline with the market. The Technical Rank is purely a function of relative price action and is primarily a predictor of relative short-term price movements. (It may thus be particularly useful in trading short-term instruments such as stock options.) Investors should try to limit purchases to stocks with Technical Ranks of 1 (Highest) and 2 (Average). Under no circumstances, however, should the Technical Rank replace the Timeliness Rank as the primary tool in making an investment decision. Over the years, the Timeliness Rank has had a superior record.

Tender Offer—a way of taking over a company by offering shareholders a fixed (or variable) price for all outstanding stock. If enough shareholders decide to sell, the company can be taken over.

3- to 5-Year Projections—a potential average high and low stock prices Value Line forecasts for a period 3 to 5 years in the future.

Thrift—a financial institution deriving its funds primarily from consumer savings accounts.

Ticker Symbol—the abbreviation of the company's name by which a security is identified for purposes of trading. Also called Stock Symbol.

Time Deposits—interest-bearing deposits that a financial institution may require to remain on deposit for a specified period of time. Also called certificates of deposit.

Timeliness Rank—the rank of a stock's probable relative market performance in the year ahead. It is derived via a computer program using as input the long-term price and earnings history, recent price and earnings momentum, and earnings surprise. All data are known and actual. Stocks ranked 1 (Highest) and 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) and 5 (Lowest) are expected to underperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead.
Investors should try to limit purchases to stocks ranked 1 (Highest) and 2 (Above Average) for Timeliness.  

**Timely Industries**—see Industry Timeliness.  

**Timely Stocks**—those ranked 1 or 2 for Timeliness. These are the stocks Value Line thinks will perform better than the Value Line universe as a whole in the coming six to 12 months. 

**Top Line**—a reference to sales, which are usually shown on the top line of an income statement.  

**Total Capital**—the sum of long-term debt, preferred stock at liquidation or redemption value, and common equity including intangibles.  

**Total Debt**—the sum of long-term debt shown in the Capital Structure box and debt due displayed in the Current Position box.  

**Total Debt Due in 5 Years**—the sum of bank notes due in 12 months (or less) and all long-term debt maturing within the next five years (including that portion of long-term debt due in the current operating year). See also Debt Due.  

**Total Distributions** (Investment Companies)—total payments (capital gains plus dividends) made to shareholders of a fund.  

**Total Interest Coverage**—pretax income plus total interest expense (including capitalized interest) divided by total interest expense.  

**Total Return (%)**—the sum of the total appreciation (or depreciation) of a stock over a given period plus any cash dividends received during the same period divided by the price of the stock at the beginning of the period. Each Value Line page shows the total cumulative returns (if available) for the past 1, 3, and 5 years. Each page also denotes the total returns for the Value Line Arithmetic Index for the same periods for comparative purposes. (For more, see Value Line Arithmetic Composite Index)  

**Total Revenues** (Securities Brokerage Industry)—gross revenue from all sources, including commissions, investment banking fees, principal transactions, and interest income (generally without deduction for interest expense) derived from funds loaned to customers' margin accounts plus interest on securities held in the company's account.  

**Trailing Price Earnings (P/E) Ratio**—the recent price of the stock divided by the sum of earnings per share reported during the last 12 months.  

**Translation Rate** (Foreign Stocks)—the exchange rate at which financial data are converted into dollars. Historical data are translated at the exchange rate on the last day of the fiscal year. In the case of quarterly data for the current fiscal year and all estimates, the translation rate is the estimated exchange rate at fiscal year end.  

**Treasury Stock**—common stock issued and then reacquired by the issuing firm. Such reacquisitions result in a reduction of stockholders' equity.  

**Unconsolidated Income**—aftertax earnings of partially or wholly owned subsidiaries whose financial results are not included in the pretax financial results or income taxes reported.  

**Underwriting Income Per Share** (Insurance [Property/Casualty] Industry)—underwriting profit divided by the number of common shares outstanding at year-end.  

**Underwriting Margin** (Insurance Industries)—the difference between 100% and the sum of the loss and expense ratios in property/casualty underwriting. It may be either positive (indicating an underwriting profit) or negative (indicating an underwriting loss).  

**Unemployment Rate**—a Labor Department measure of the ratio of the number of unemployed in the labor force, expressed as a percentage. The Civilian Unemployment Rate is based on a work force that excludes U.S.-stationed members of the armed forces. The National (or Total) Unemployment Rate is based on a work force that includes U.S.-stationed members of the armed forces.  

**Unit Labor Costs** (Nonfarm)—a Labor Department index based on the ratio of the Compensation Per Hour Index (Nonfarm) and the Output Per Hour Index (Nonfarm). Unit labor costs are useful because they illustrate how productivity gains offset rising wages, or how wage increases outstrip productivity gains.  

**Unrealized Appreciation** (or Depreciation)—the dollar amount by which the market value of a holding exceeds (or falls below) its cost.  

**Untimely Stocks**—those ranked 4 or 5 for Timeliness. These are stocks Value Line thinks will perform less well than the market in the coming six to 12 months.  

**Upstream**—see Downstream.  

**Value Line Arithmetic Composite Index**—an equally weighted price index of all stocks covered in The Value Line Investment Survey. Arithmetic refers to the averaging technique used to compute the average. See Arithmetic Average.  

**Value Line Geometric Composite Index**—an equally weighted price index of all stocks covered in The Value Line Investment Survey. Geometric refers to the averaging technique used to compute the average. See Geometric Average.  

**Value Line Geometric Industrial Index**—an equally weighted price index of all stocks in The Value Line Investment Survey, except for utilities and rails. Geo-
metric refers to the averaging technique used to compute the average. See Geometric Average.

**Value Line Geometric Rails Index**—an equally weighted price index of railroad stocks reviewed in The Value Line Investment Survey. Geometric refers to the averaging technique used to compute the average. See Geometric Average.

**Value Line Geometric Utilities Index**—an equally weighted price index of utility stocks reviewed in The Value Line Investment Survey. Geometric refers to the averaging technique used to compute the average. See Geometric Average.

**Warrant**—an option to buy a security, usually a common stock, at a set price (exercise price) over an established number of years. A warrant has no claim on either the equity or the profits of a company.

**Working Capital**—current assets less current liabilities. See also Current Assets, Current Liabilities, and Net Working Capital.

**Writedown**—a company’s recognition of a reduction in value of an asset. The decline in value is charged against income in the period that the writedown is taken.

**Yield (for stocks)**—the estimated dividends for the next 12 months divided by the current price, expressed as a percentage.

**Yield-Cost Margin (Thrift Industry)**—the difference between interest rates earned (on loans and other earning assets) and interest rates paid (on deposits and other sources of funds).

**Yield Curve**—a measure of the relationship between short- and long-term interest rates. Often the yields on three-month Treasury bills and 30-year Treasury bonds are compared. The yield curve is said to be positive when long-term rates are higher than short-term rates. When short-term and long-term rates are about equal, the yield curve is said to be flat. The yield curve is said to be inverted when short-term rates are higher than long-term rates.