BetterInvesting™

EDUCATIONAL SERIES

STOCK SELECTION GUIDE HANDBOOK

Official Guide

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Editor's Note

Welcome to the 2016 edition of the ***Stock Selection Guide Handbook***. This book is based on the S*tock Selection Handbook* last published in 2003 and includes some important differences.

First, the book has been edited to reflect changes in how Stock Selection Guide studies are conducted. Gone are the days of pencils, sheets of paper, rulers, and calculators. SSGs today are completed using online applications or software that automatically import data and perform calculations. The graphics in this book are almost entirely from BetterInvesting's SSGPlus online application.

Second, the handbook is more closely aligned with the association's current teaching regarding SSG studies. BetterInvesting has robust online educational resources, including webinars and worksheets, to help beginners and others complete studies. The book's editors have attempted to streamline the education so that the book is more consistent with these resources.

Third, we've tried to edit the material so that it doesn't become dated so quickly. We've relied mainly on fictional examples in the book, and we've greatly reduced the emphasis on the source of data for SSGs. That said, our plan is to update the book more frequently. If you have any corrections or suggestions, please contact us at **bi@betterinvesting.org.**

Introduction

Congratulations! You've made a wise decision to learn how to analyze stocks to build and manage your own investment portfolio.

If you don't realize it yet, you're the best person to manage your finances. You're investing your money for important reasons — a new home, your kids' college tuition, and retirement — so no one else will care about the results of your portfolio the way you will.

Risk and reward go hand in hand. What all investors would like, or course, is a high-reward, or return, with very low risk. Unfortunately, as investment risk goes down, so does the potential reward.

When you simply save money, you put it in a bank account somewhere where it will be safe. In exchange for this safety, you receive a very small amount of interest on your money. Unfortunately, even keeping money in the bank exposes your savings to the risk of inflation.

Inflation reduces the buying power of your money with each passing year. In fact, after 30 years of 3% inflation, $1 is worth only 40 cents in today's buying power. If you managed to squirrel away $1 million, that inflation would reduce the buying power of your nest egg 30 years later to only $400,000.

Investing your money instead of just saving it offers the potential for a much higher return. Not surprisingly, investing carries a greater risk than socking your money away in a savings account. If you seek a higher return by investing, you have be willing to take on a higher risk that your investment may not perform the way you expect.

Investing through mutual funds is one way to go. They're easy to start when your contributions are tiny. And they don't require quite as much study as individual stocks, so they could be answer for a person on the go. Over longer periods, however, most actively managed mutual funds don't keep up with the major stock market indexes. On the other hand, you can use low-cost index funds to earn a return that parallels returns for all or some portion of the stock market. If you want to learn more about investing in mutual funds, read the ***BetterInvesting Mutual Fund Handbook.***

If you choose to work with a financial adviser, you should make sure that the fee is worth the services you receive. Even with a professional's help, however, you're better off being a knowledgeable consumer. Only then

can you identify whether your adviser is suggesting investments that meet your objectives for return and risk. In addition, you can protect yourself from less scrupulous advisers who might try to sell you unsuitable investments or trade frequently in your account to increase the money they earn.

If you really want your portfolio to shine, there's nothing like investing in quality growth stocks. Between 1926 and 2014, the average compounded annual return on an investment in the stock market with dividends reinvested was around 10%. If you were to invest $10,000 one time only and achieve that 10% average return for 40 years, your nest egg would be worth over $450,000! Imagine how much you could collect if you contributed some money to your portfolio each month.

Of course, some years are better than others. Stocks increased 54% in 1933, whereas in 1931 they plummeted 43%. The key to success — and one of BetterInvesting's guiding principles — is to invest for the long term.

BetterInvesting (aka National Association of Investors Corporation) has given millions of people the education and tools they need to invest successfully in individual stocks. Many of these investors, or the investment clubs to which many belong, earn returns that surpass the overall stock market indexes — and in turn the returns achieved by many financial professionals.

BetterInvesting believes that your goal for your portfolio's average annual compound return should be 15%. That goal is meant to keep you focused on holding the best types of stocks for your portfolio. Even if you "only" achieve for a lower annual return such as 12%, you would still do extremely well. All it takes is the ability to understand some relatively basic math concepts, to follow common-sense principles, and to exhibit patience as the market goes through its ups and downs.

Investing in stocks is like reading a road map. You have to know where you want to go for the map to be helpful. So take a quiet afternoon and define your objectives, whether it's sending your five kids to Ivy League colleges, retiring at 45, or traveling the world for a year. Don't forget to establish your tolerance for risk. The last thing you want is for your investments to make you nervous. Then, with these criteria in mind, you can start to build a financial plan that gets you where you want to go.

CHAPTER ONE

The BetterInvesting Approach

Do you have big plans for life, but aren't quite sure how to finance them? If so, you're reading the right book. The BetterInvesting approach to investing teaches you to take charge of your investments and make them work toward your goals.

Since 1951, more than 5 million people have learned to invest successfully the BetterInvesting way. BetterInvesting, a nonprofit organization formerly known as National Association of Investors Corporation, was founded that year by George Nicholson and Tom O'Hara.

Nicholson, a University of Michigan alum and Harvard-educated securities analyst, was passionate about helping ordinary Americans achieve their financial goals by investing in common stocks. He helped a group of men, including O'Hara, form an investment club called the Mutual Investment Club of Detroit in 1940 and provided a structure and process for selecting investments. These principles have remained in place through both bear and bull markets over the decades.

People following BetterInvesting's teachings have discovered that investing doesn't have to be scary or difficult. By applying a few simple principles, any investor willing to dedicate a few hours and dollars each month can build a nest egg that would make anyone proud.

BetterInvesting's four principles of investing are:

- Invest regularly, regardless of the market outlook.
- Reinvest all earnings.
- Invest in quality growth companies.
- Diversify to reduce risk.

The principles might seem so simple they couldn't possibly work. On the contrary, simplicity is the beauty of the BetterInvesting approach. The principles make so much sense, they're hard to forget — and are so easy that you can't find a good excuse for not using them.

1. Invest regularly, regardless of the market outlook.

When you start investing, you might second-guess the stock that goes nowhere or worry about the market tanking right after you buy. For beginners, it's natural to focus on your mistakes and wonder whether your successes will turn sour. Time, experience, and some evidence of long-term success help dispel your fears.

In the meantime, remind yourself that the value of stocks between 1926 and 2014, with dividends reinvested, has increased by about 10% a year despite cycles of boom, recession, depression, and recovery. You win — and win big over the long term — simply by investing in the stock market.

More often than not, it's a bad time to invest a big wad of money. Your kids need braces, your car needs new tires, there's always something more urgent. How about $1 a day? That's no more than the pocket change you drop in a jar when you get home. But after investing $1 a day in stocks from your 15th birthday until you retired at 65 (a total contribution of about $18,250), a respectable return of 10% would grow your savings to close to half a million dollars!

Investing small amounts regularly can calm beginners' jitters, not to mention improve your results. The technique, called dollar-cost averaging, is simply investing a fixed amount of money on a regular schedule.

When you do that, you automatically buy more shares when the price is lower and fewer when the price is higher. The result is a lower average purchase price and a higher overall return. **See Figure 1.1** for the math of dollar-cost averaging.

Figure 1.1: How Dollar-Cost Averaging Works

Dollars Invested	Share Price	Shares Purchased
$100	$10.00	10.00
$100	$12.50	8.33
$100	$8.00	12.50
$100	$12.00	8.33
$100	$15.00	6.66
Total Invested		**$500**
Shares Purchased		**45.82**
Average Share Price		**$11.40**
Average Purchased Share Price		**$10.91**

Some people try to time the market, attempting to buy at the lowest lows and sell at the highest highs. They study and research and watch the market, often missing life in the process. What they also missed is that the return on money invested in the Standard & Poor's 500 index for all trading days from 1995 through 2014 was 9.9%. If you had missed only the 10 best days in those nine years, your return would have dropped to 6.1%!

2. Reinvest all earnings.

Companies generally have two ways to use their earnings. They can plow the money back into the company to help it grow or distribute some to owners of the company — the shareholders.

This distribution to shareholders of after-tax profits is called a dividend. Just like the dollar a day you decided to invest after reading the first BetterInvesting principle, the dividends companies pay to their shareholders initially might seem like small potatoes. Don't make the mistake of squandering them. Reinvesting those tiny dividends turbocharges your investment return. Also reinvest your capital gains — that's the profit from selling your stocks.

Reinvesting the dividends that companies pay to you as well as your capital gains works the way rabbits multiply. When the offspring start to have babies of their own, the hutch gets crowded in a hurry. Well, when dividends and capital gains are reinvested to buy additional shares that start earning dividends and rising in price, the dollars in your account start stacking up.

Earning dividends on your earnings and reinvesting your capital gains is called compounding. The results are simply magnificent. If you invested $100 in the S&P 500 index in 1926 and spent all the dividends you received, you would have amassed $8,627 by January 2016. But if you had reinvested those dividends, you'd be rolling in $184,998!

Figure 1.2: Investment Results Over Time

Years	One-Time $100 Investment		$100 a Month Dividends	
	Dividends Spent	Dividends Reinvested	Dividends Spent	Dividends Reinvested
5	$165	$182	$7,744	$8,167
10	$271	$330	$20,484	$23,004
15	$445	$600	$41,447	$49,598
20	$773	$1,089	$75,937	$98,926
25	$1,206	$1,979	$132,683	$187,885
30	$1,984	$3,595	$226,049	$349,496
40	$5,370	$11,865	$632,408	$1,176,477
50	$14,537	$39,158	$1,732,439	$3,905,834

Check the account balances in **Figure 1.2** to see the difference that regular investing and reinvestment can make in your investment results over time. This example uses a 10% return from capital appreciation (the increase in stock price) and 2% return from dividends.

3. Invest in quality growth companies.

Quality growth companies make investing easy. They're easy to understand. Growth companies generally increase their revenues and earnings faster than the overall economy and inflation combined. The ones to buy also grow faster than a lot of their industry competitors.

Furthermore, what they've done in the past bodes well for more success in the future — and a more valuable share of stock five years in the future. As sales and earnings grow, each share of stock controls a more valuable slice of a company, so eventually people will pay more for that slice.

After you learn what to look for, growth companies are easy to spot. Then you just have to check in each quarter to see whether their growth is continuing. By investing in growth companies, you can (mostly) ignore the state

of the market or where a company is in the business cycle. Even better, with quality growth companies there's no need to worry about whether strategies to turn a company's problems around are successful.

Companies can grow sales in a variety of ways, including:

- expanding territory
- increasing market share
- building new stores
- introducing new products or new applications for existing products
- acquiring competitors
- increasing prices

But there's a little more to it. Growth is a balancing act, perhaps closer to patting your head and rubbing your stomach at the same time. You can't increase prices or gain market share with lousy products. You had better make the best Freeblesnap in the world if you want to increase prices when competition is sniffing around. In high-tech industries or those that brave fickle consumer preference, management has to plan how to avoid getting stuck with obsolete products. Companies have to do all these things while keeping the cost of goods sold and overhead expenses as low as possible.

Companies can hit the limelight with a popular product, then fade as quickly as the craze for Beanie Babies. (You remember them, right?) Other companies float along in the rising tides of their industry. But for sustained performance, nothing beats great management — executives who can balance the pressures while navigating the company to higher ground.

Growth tends to slow as companies get bigger. It's like trying to turn an oil tanker or move a freight train. Nothing moves quickly in a big company. There's nothing slow about the explosive growth of a young company, but that growth sometimes includes a speedy drop in the stock price. The tortoise often outruns and out-invests the hare.

Unfortunately, some companies don't revitalize their products or adjust as the world changes. When a company's growth stalls or, even worse, starts to decline, it's time to get out and find another investment.

Quality is often difficult to quantify; it's like the solid but soft thump of a closing car door or the ambiance of a restaurant. Some attributes of a quality company are qualitative measures, such as leadership in the industry and depth of management.

Fortunately, other measures are easy to assess after you know how, such as financial strength, effective research

and development, market strength, stability of earnings, and pre-tax profit margins and return on equity that are above industry averages. We won't get into details here, but read Chapter 4 on evaluating management for more about these measures.

A poor-quality stock with dubious growth rates is a dog no matter how low the price. But even the highest-quality growth stock can be a poor investment when it's overvalued. Dollar-cost averaging can be an effective tactic against paying too much for a holding. But when you decide to purchase a stock, you should make sure that it's a quality growth company at a reasonable price.

As you're managing your portfolio, you'll often buy more shares of stocks that you own instead of investing in new ones. You can get an extra kick from dollar-cost averaging by adding your contributions to the stock that currently offers the best return (earnings) with acceptable risk.

4. Diversify to reduce risk.

If you could pick the one company that was destined for years of double-digit growth, you would make the most money by investing all your cash in that one investment. But you won't be able to pick only the big kahuna — you won't even be able to pick winners 100% of the time, even with diligent application of BetterInvesting tools. Be prepared for one out of every five stocks you buy to be a loser. Then you can sigh with relief when three do what you expect and celebrate the one acquisition that exceeds your expectations.

The moral of the story is not to keep all your eggs in one basket or all your money in one stock (or industry). Diversifying your investments reduces your risk. It prevents a mistake from wiping out a big chunk of your net worth. For example, a competitor's new product or consumers' changing tastes could put a small company you were sure was a winner out of business. Large companies might grow more slowly but usually have the wherewithal to ride out some storms. Even industries rise and wane.

When you choose the stocks for your portfolio from a variety of industries and company sizes, you can earn a market-beating return without riding an investment roller coaster. True, if you're buying your first stock, there isn't a whole lot you can do to diversify that portfolio.

But you need only around 10 to maybe 20 companies of different sizes from variety of unrelated industries to reduce the risk in your portfolio. You actually can diversify too much. When you start buying a little bit of everything, your investment return degenerates toward that of a stock market index but with a lot more risk, not to mention brokers' commissions. Keep your stock portfolio simple. If you still crave one of every stock, put some cash in a low-cost index mutual fund.

Don't diversify just for the sake of diversification. You're better served by a portfolio containing a small number of carefully chosen, quality growth companies than by one with a diversified yet inferior mix of many stocks.

The best rule of diversification is to hold no more stocks than you can remain informed on. **Figure 1.3** details some rough guidelines for diversifying by company size. What constitutes a small, medium, and large company will change over time, as will the anticipated growth rate.

Figure 1.3: Diversifying by Company Size

Sales	Size	% of Portfolio	Anticipated Growth Rate
Less than $1 billion	Small	25%	More than 12%
$1 billion – $10 billion	Medium	50%	7% – 12%
More than $10 billion	Large	25%	5% – 7%

Fundamental Analysis With the Stock Selection Guide

The following chapters detail how to use BetterInvesting's primary stock analysis tool, the Stock Selection Guide (SSG), to select stocks that will best help you leverage BetterInvesting's principles and fulfill your investment goals.

BetterInvesting follows a stick-to-the-basics approach using fundamental analysis. By looking at the basic measures of a company, such as sales and earnings growth, profit margin, return on equity, price-earnings ratio, and a few other financial measures, you can judge prospects of a company and estimate a value for its stock in the future. From there, it's an easy leap to compare the current stock price to the future value and see whether you've found a stock to buy.

Your study of a company's fundamentals meshes perfectly with the long-term view that BetterInvesting members take. In a high-caliber company, the basic drivers that make the company a good investment typically don't disappear overnight — although they can deteriorate over a few fiscal quarters. It might take some digging to see whether a company passes the fundamentals test. But after it passes, you might hold that stock for years, sometimes even decades. You don't have to watch your investment day by day; checking that the basic measures still look good when the company issues a quarterly report is sufficient.

BetterInvesting's philosophy is that sales drive earnings, and earnings drive stock prices. Growth stocks have sales and earnings growth rates that outperform the economy and inflation — and, quite often, other stocks in the marketplace. Growth investors buy these stocks because they expect the stock to increase in value as the earnings increase.

Now that you've learned the background of BetterInvesting's approach, it's time to learn more about the SSG.

CHAPTER TWO

Introduction to the Stock Selection Guide

BetterInvesting's investing approach is alluring for its simplicity. You can start studying stocks after understanding just a few key concepts. Using conservative, reasonable judgment on the Stock Selection Guide, our primary tool for studying a stock's investment potential, you can invest successfully even as a beginner. At the other end of the spectrum, even experienced investors use the SSG. Experience has shown the SSG to be an excellent tool, explaining a large percentage of stock valuation theory.

The first two sections of the SSG focus on growth characteristics and management performance, whereas the remaining three sections help to identify a stock's value. In other words, the SSG helps you answer two questions: "Is this a quality company?" and "Is its stock selling at a reasonable price?" By "reasonable price," we mean that the stock demonstrates the potential for adequate return.

A major benefit of using this well-established, time-tested tool is that you'll be analyzing stocks using a consistent framework to follow each time. Consistency is very important, helping to ensure that you're following your chosen investment philosophy every time you make an investment decision.

The SSG is an aid to help you make your own judgments about a company's future prospects for growth. The Guide can't make investment decisions for you. It simply offers a way to organize and analyze a company's financial history so that you can determine its investment suitability for yourself.

The SSG uses fundamental rather than technical analysis to determine whether a stock might be a good investment choice. Investors using fundamental analysis use data from company operations such as revenues and earnings. Technical analysis, on the other hand, uses data about a company's stock price movements and trading volume, along with other information, in an attempt to identify patterns that will show the best time to buy and sell the stock.

Growing sales and earnings are the most fundamental of fundamental measures. Higher sales lead to higher earnings, which increase the value of a company. Eventually someone will pay more for something that has increased in value.

The next several chapters will walk you through the SSG's five sections:

- Visual Analysis

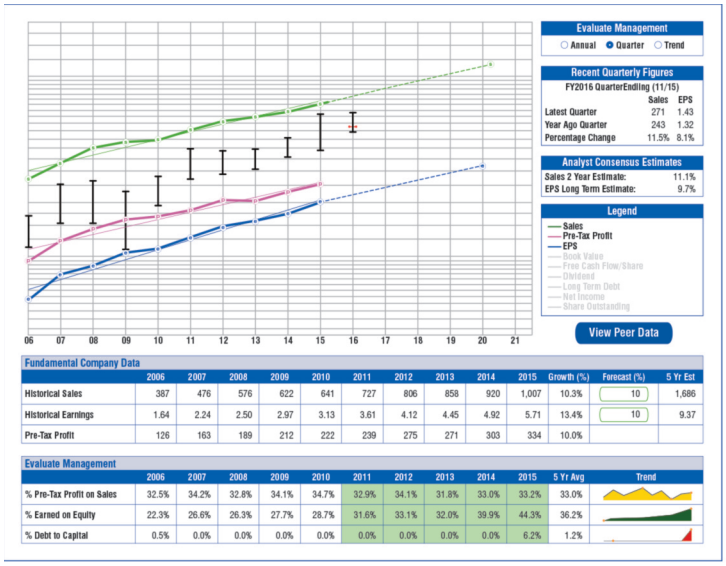
- Evaluate Management
- Price-Earnings History
- Evaluating Risk and Reward
- Five-Year Potential

Visual Analysis

Growth companies increase revenues and earnings faster than the general economy (including consideration for inflation) and most competitors in the same industry. These companies work hard to produce consistent results for their shareholders. Market conditions, fluctuations in the business cycle, and successful turnarounds don't matter as much when you invest in growth companies for the long term.

The SSG's Visual Analysis section displays a graph of historical sales (green line), earnings (or more exactly, earnings per share or EPS) (blue), pre-tax profit (PTP) (green), and stock prices (black bars) for a given company ***(See Figure 2.1)***. You'll be amazed at how quickly you learn to recognize growth and quality patterns in the trend lines for sales, earnings, and pre-tax profit. The upward angle of the historical trend lines shows the rate of growth, while nearly straight lines represent the consistent performance of a quality management team.

Figure 2.1: Visual Analysis Graph of Fundamentals



Fundamental Company Data

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Growth (%)	Forecast (%)	5 Yr Est
Historical Sales	387	476	576	622	641	727	806	858	920	1,007	10.3%	10	1,686
Historical Earnings	1.64	2.24	2.50	2.97	3.13	3.61	4.12	4.45	4.92	5.71	13.4%	10	9.37
Pre-Tax Profit	126	163	189	212	222	239	275	271	303	334	10.0%		

Evaluate Management

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	5 Yr Avg	Trend
% Pre-Tax Profit on Sales	32.5%	34.2%	32.8%	34.1%	34.7%	32.9%	34.1%	31.8%	33.0%	33.2%	33.0%	
% Earned on Equity	22.3%	26.6%	26.3%	27.7%	28.7%	31.6%	33.1%	32.0%	39.9%	44.3%	36.2%	
% Debt to Capital	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	1.2%	

Evaluate Management

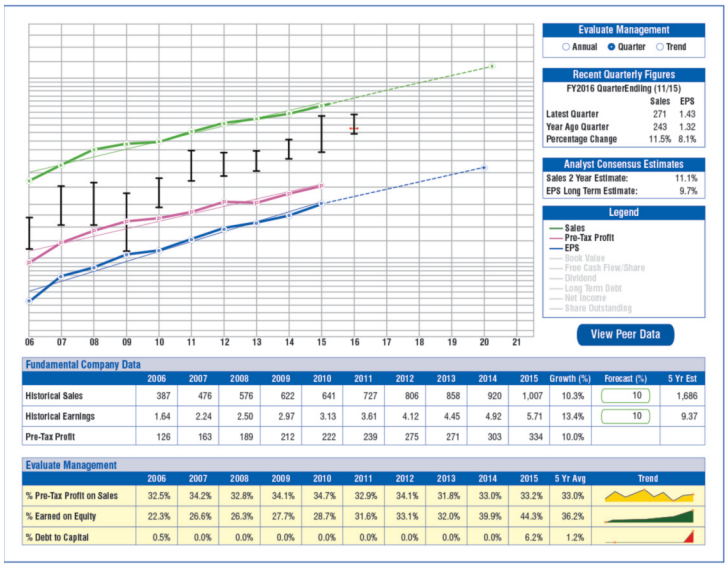
Good growing companies become leaders in their industry with substantial financial strength. Strong, consistent growth is the focus of the SSG's Visual Analysis section. Good management produces consistent performance by taking advantage of the opportunities and mitigating the hazards. In the Evaluation Management section of the SSG ***(see Figure 2.2)***, we can see other indications that management is on the ball in stable or steadily increasing pre-tax profit margins and return on equity, and a reasonable amount of debt.

The pre-tax profit margin, referred to on the SSG as the % Pre-Tax Profit on Sales, is the percentage that the company gets to keep, before taxes, of what it makes in sales. We arrive at the profit figure by subtracting the

company's costs, such as ones for overhead and the cost of goods sold, from sales. The margin is the percentage of profit for every dollar of sales.

Stable or steadily increasing pre-tax profit margins show that management can balance the strategies that increase sales and contain or decrease costs. Management can increase sales in many ways: expanding territory, persistent innovation and introducing new products, taking market share from competitors, or increasing the price per unit of its products.

Figure 2.2: Evaluate Management Section (Shaded)



Management can decrease the cost of goods sold by paying less for supplies or increasing the efficiency of production. Management must also plan production to reduce the amount of unsellable inventory and control or reduce overhead. Overhead includes salaries and benefits, travel expenses, marketing, training, rent, advertising, utilities, and so on. We look at the profit margin before taxes because management has limited capability to control tax rates.

Percent earned on equity, or return on equity (ROE), is the return that management achieves on investors' money (including earnings retained in the business). Steadily increasing ROE means that the company is receiving a better return each year on the money it has invested.

The ROE is derived by dividing a company's earnings per share by the book value per share. Book value, often called equity or shareholders' equity, represents the net amount of company dollars after you subtract total liabilities from total assets. ROE indicates how well management is employing a company's resources contributed by shareholders' money and earnings invested back into the company to create new assets that grow sales.

The Evaluate Management section also includes information about the company's debt history in relation to its total capital. Debt at high levels is risky for a company because it has to pay its debt obligations regardless of how well it's doing. If a company suffers from business troubles, such as ones caused by recessions, it may run short of money to pay the debt obligations and go out of business. Debt compounds the risk to shareholders

because the company must pay claims from debt and preferred stockholders before common shareholders receive anything.

In general, a debt-to-capital percentage greater than 33% is risky. But you should compare a company's debt percentage to the industry average before deciding. Some industries, such as banks, financial institutions, and utilities, typically operate using higher levels of debt. Some successful companies in other industries have proven that they can carry high debt over many years.

In fact, for each measure in the Evaluate Management section, see how the company you're studying stacks up with peers. You're looking for companies that are among the best in their industry. BetterInvesting's online SSG programs allow you to compare these metrics with those of peers.

If growth and consistency aren't apparent after looking at the SSG's Visual Analysis and Evaluate Management sections, you don't need to explore the stock further. If the company passes the quality test, you'll develop five-year forecasts for sales and earnings growth before moving on to the next section to study the price-earnings history.

Price-Earnings History

Even with the best-quality growth stock, you make your money when you buy at a reasonable price. Paying too much can turn an excellent growth stock into a mediocre investment. True, long-term investing can eventually overcome a high purchase price, but discriminating selection when you buy maximizes your portfolio performance.

Figure 2.3: Price-Earnings History Section

CLOSING PRICE (02/01/16): 149.83 **HIGH THIS YEAR:** 177.28 **LOW THIS YEAR:** 139.01

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	112.4	76.2	3.61	31.1	21.1	1.00	27.7%	1.3%
2012	109.2	80.9	4.12	26.5	19.6	1.16	28.1%	1.4%
2013	111.6	86.9	4.45	25.1	19.5	1.32	29.7%	1.5%
2014	129.3	101.1	4.92	26.3	20.5	1.48	30.1%	1.5%
2015		110.8	5.71	30.5	19.4	1.66	29.1%	1.5%
AVERAGE		**91.2**		**27.9**	**20.0**		**28.9%**	
CURRENT/TTM			**5.82**			**1.76**	**30.3%**	
AVERAGE PRICE EARNINGS RATIO: 24.0					**CURRENT PRICE EARNINGS RATIO: 25.8**			

Show / Hide Price/Earnings Chart View Peer Data

On the other hand, a poor-quality growth stock is a lemon no matter how low its price. Make sure that a company offers growth and consistency before looking at whether its current price is a reasonable value.

The Price-Earnings History section sets up data necessary for evaluating the price-earnings ratios of an investment. **(*See Figure 2.3.*)** The P/E is the price you'll pay for a dollar of a stock's earnings. You'll use this information to determine the stock's potential high and low prices over the next five years.

The information in this section includes a company's high and low stock price for the past five years along with

each year's earnings per share. These figures are used to compute the annual high and low P/Es. The P/E ratios for each year contribute to the calculations for average high and low P/Es over the past five years as well as the five-year average P/E.

The judgments you form from the historical P/E information will help you forecast future high and low P/Es. These forecasts will be critical for determining a stock's potential high and low prices and the upside-downside ratio in the Evaluating Risk and Return section as well as a stock's five-year investment potential in the final section.

The Price-Earnings History section also includes information about a company's dividends over the past five years. Besides the dividend per share, you can see how much of a company's earnings per share was paid out in dividends as well as the percentage of the company's lowest stock price of the year paid out as a dividend; at the year's lowest price the dividend yield is at its highest point. The information from this section is used for the Five-Year Potential section.

Evaluating Risk & Reward

This section uses the estimated EPS, which is based on the projected growth rate entered on the Visual Analysis section, and your projected high and low P/E values to calculate the highest and lowest prices you would reasonably expect the company shares to sell for over the next five years. Once the expected price range is established, it can be determined whether the stock is a good investment at the current price. ***(See Figure 2.4.)***

Figure 2.4: Evaluating Risk and Reward

A. HIGH PRICE – NEXT 5 YEARS

Avg. High P/E: **27.9** x Estimate High Earnings / Share: **9.37** = Forecasted High Price: **261.3**

B. LOW PRICE – NEXT 5 YEARS

(a) Avg. Low P/E: **20.0** x Estimate Low Earnings / Share: **5.82** = Forecasted Low Price: **116.4**

(b) Avg. Low Price of Last 5 Years:

(c) Recent Market Low Price:

2014 Low Stock Price: **101.1** 52 Week Low Price: **139.0**

2015 Low Stock Price: **110.8**

(d) Price Divident Will Support: $\frac{\text{Indicated Dividend}}{\text{High Yield}} = \frac{1.76}{1.5\%} = \mathbf{115.8}$

Selected Forecasted Low Price: **116.4**

C. ZONING using 25%-50%-25% (click to toggle)

Forecast High Price: **261.3** Minus Forecast Low Price: **116.4** = **144.9** Range. 25% of Range: **36.2**

Buy Zone:	**116.4**	to	**152.6**
Hold Zone:	**152.6**	to	**225.1**
Sell Zone:	**225.1**	to	**261.3**

Closing Stock Price of **149.83** is in the **BUY** Zone.

Show / Hide Gain vs Loss Chart

D. UPSIDE DOWNSIDE RATIO (POTENTIAL GAIN VS. RISK OR LOSS)

$\frac{\text{Forcasted High Price – Closing Price}}{\text{Closing Price – Forcasted High Price}} = \frac{(261.3 - 149.83)}{(149.83 - 116.4)} = \frac{111.46}{33.43} = \mathbf{3.3\ to\ 1}$

E. PRICE TARGET (Note: This shows the potential market price appreciation over the next five years in simple interest terms.)

$\frac{\text{Forcasted High Price}}{\text{Closing Price}} = \frac{261.3}{149.83} = \frac{(1.7439 \times 100)}{33.43} = (1.7439 - 100) = \mathbf{74.4\%\ Appreciation}$

The following portions of the Evaluating Risk and Reward section walk you through the process of assessing risk and reward in an orderly fashion:

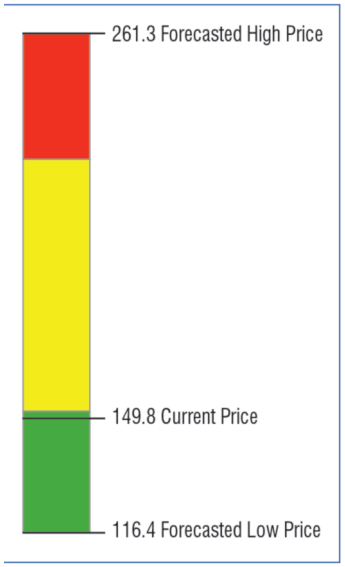
Estimated high and low prices:

You calculate the forecast high price by multiplying the projected high P/E investors might pay for the company by the highest earnings that the company might generate in the next five years. Similarly, the typical esti-

mated potential low price for a growth company is the projected low P/E multiplied by the lowest earnings the company might generate in the next five years. Chapters 5 and 6 go into the details about how to pick the P/Es and EPS to forecast high and low prices five years out.

Price zones: One way to choose a good buy price is to divide the range between the forecast high and low prices into three zones: buy, hold, and sell. If the current price is in the buy range, most of the potential price movement is up, so the potential reward is great compared with the potential loss.

Fig. 2.5: Upside-Downside Ratio



The top of the buy zone represents the highest reasonable purchase price. In many cases, premier companies in an industry are out of the buy range. But you'll learn that stock prices often go up and down for many reasons other than the company's performance. You can establish a watch list and wait for the stock to drop into the buy zone. Of course, you should check to make sure that the price drop wasn't because of problems that arose in the company.

Upside-downside ratio: This ratio compares the amount of potential stock price gain to potential stock price decrease **(*see Figure 2.5*)**. BetterInvesting considers a company a possible good value if the potential gain is at least three times the potential loss (a ratio of 3:1). The upside-downside ratio is purely a measure of the potential increase or decrease in stock price, not the probability that the stock price will reach those levels.

Price target: This is simply the price gain expected from the current price. It's calculated in simple interest terms rather than compound interest. You'll see the compound interest information in the Five-Year Potential section.

Five-Year Potential

This section provides what you've waited for: information on whether the stock is a candidate for purchase. Your ultimate goal is the total return that you receive by buying the stock. The total return is the return from both price appreciation and dividends. Evaluate the potential return to determine whether the stock would help you achieve your investing goals.

The Five-Year Potential section evaluates the total return (from both price, or capital, appreciation and dividends) for an investment if you purchase the stock at its current price. **(*See Figure 2.6.*)**

The dividend information comes from the Price-Earnings History section. Besides the dividend per share, you can see how much of a company's earnings per share was paid out in dividends as well as the percentage of the company's lowest stock price of the year paid out as a dividend; at the year's lowest price the dividend yield is at its highest point.

Figure 2.6: Five-Year Potential

A. CURRENT YIELD

Indicated Annual Dividend / Closing Price = 1.76 / 149.83 = 0.0117 = 1.2%

B. AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout / Forecast High P/E = 28.9 / 27.90 = 1.0%

AVERAGE YIELD - USING FORECAST AVERAGE P/E

Avg. % Payout / Forecast Average P/E = 28.9 / 23.95 = 1.2%

C. COMPOUND ANNUAL RETURN - USING FORECAST HIGH P/E

Annual Appreciation	11.8%
Average Yield	1.0%
Annualized Rate of Return	12.8%

COMPOUND ANNUAL RETURN - USING FORECAST AVERAGE P/E

Annual Appreciation	8.4%
Average Yield	1.2%
Annualized Rate of Return	9.6%

SSG RESULTS SUMMARY

Zone:	BUY
Upside Downside Ratio	3.3 To 1
Total Return (High P/E):	12.8%
Projected Return (Avg. P/E):	9.6%
Buy price to satisfy US/DS of 3 to 1 and 15% total return:	135.9
Closing Price (02/01/16):	149.83

BetterInvesting suggests that you strive for a portfolio return of 15% a year. But not every company in your portfolio needs to achieve that return to meet your financial goals.

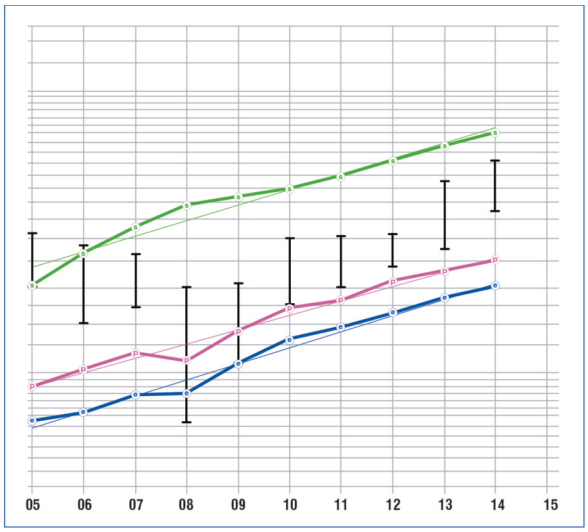
Small companies might provide a total return greater than 15% because of their faster growth rates. Small companies usually don't pay dividends, so their total return is often from price appreciation alone.

Large companies tend to grow slower, which can lead to less return from price appreciation. When you add in the return from dividends, however, you might still end up with a total return greater than 15%.

SSG Visual Analysis — A Picture of Past Growth

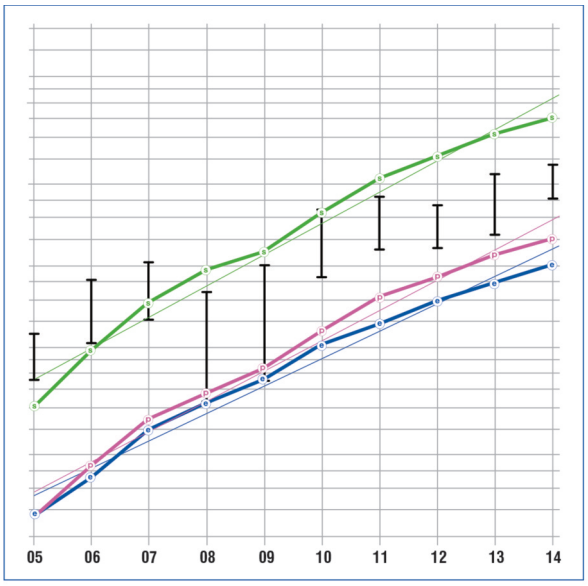
You can scour company financial and analyst reports until your eyes are bleary, but those tables of numbers might continue to confuse. Of the thousands of companies you can buy, only some are good long-term investments. You need a snapshot that shows whether you've found a divine investment or a financial fiasco.

Figure 3.1: Consistent Growth



The SSG's Visual Analysis section includes graphing of historical sales (green line), EPS (blue), pre-tax profits (red), and prices for a stock (black bars). Numbers growing at a constant rate appear as a straight line on the SSG's graph, which makes it easy to spot a consistent growth company. Lines for historical sales, EPS, and pre-tax profit that climb the graph like railroad tracks — straight and parallel to one another — represent the consistent performance produced by a skilled management team. ***(See Figure 3.1.)*** The angle of those lines shows whether the company's growth is strong enough to meet your investment objectives.

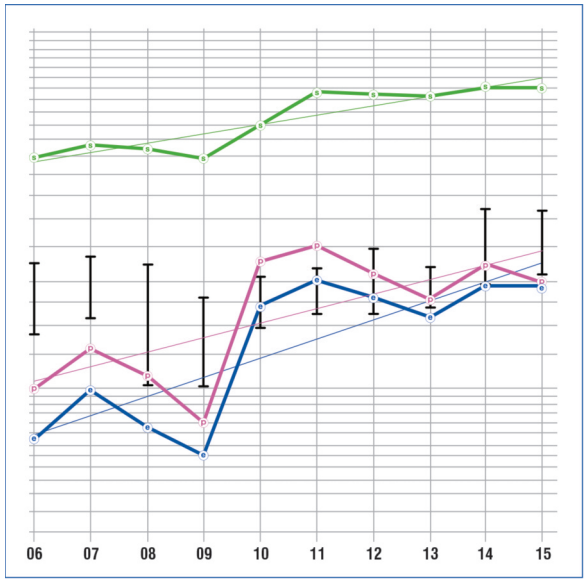
Figure 3.2: Slowing Growth History



A good-looking graph doesn't make a company a sure thing, but it indicates that the company is worth more study. An ugly graph is a sign of problems. As a beginner, you're better off leaving companies with unsightly graphs to the experts.

Problem performance comes in several guises. The SSG's Visual Analysis makes slowing growth, erratic growth, years with losses, and slumps in growth readily apparent. For very young companies, accelerating growth rates can be soon followed by slower and

Figure 3.3: Erratic Growth

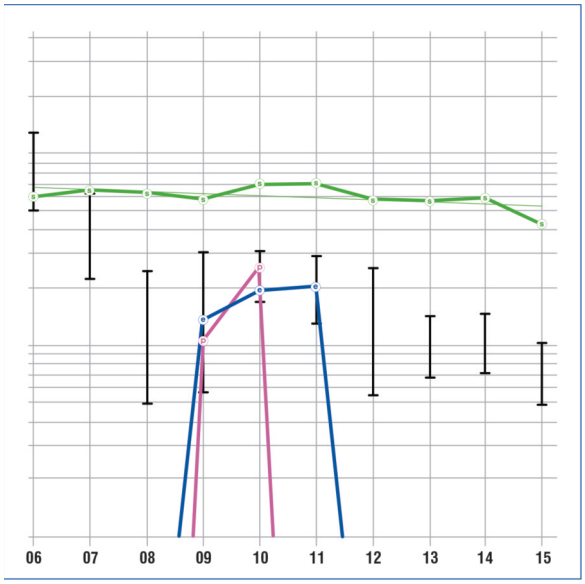


slower growth rates. Slowing growth ***(see Figure 3.2)*** is to be expected, and you must learn to recognize a normal rate of slowing. Companies that grow at 50% or more a year simply can't continue at that pace over the long term. But it's important to recognize slowing growth rates so that you can estimate sales, EPS, and potential future prices conservatively. When a large company's growth slows below that of the economy, your chances of meeting your investment objectives are slim.

Erratic growth ***(see Figure 3.3)*** poses three problems. First, it wears on your nerves to watch a stock price gyrate along with sales and EPS numbers. More importantly, inconsistent growth is a sign that management is struggling. That struggle could bode badly for future performance. Finally, we depend on consistency when making judgments with confidence.

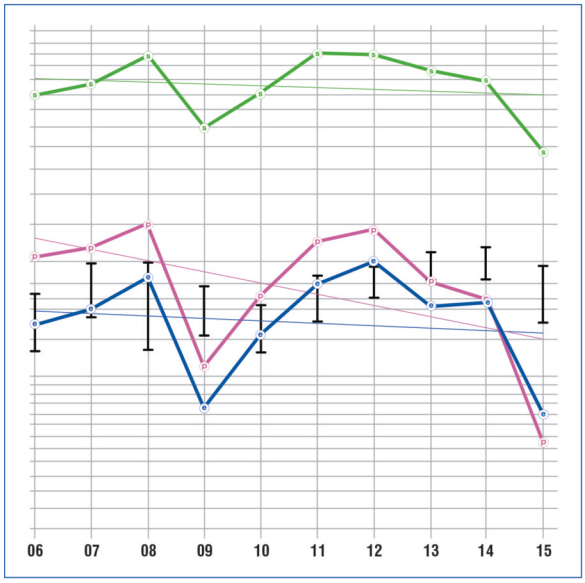
When a company loses money, it's hard to ignore on the SSG's Visual Analysis section. ***(See Figure 3.4.)*** There's no place to plot a negative number, so it drops off the bottom of the page.

Figure 3.4: Losing Money



Slumps show up as bowl-shaped droops in the historical lines for sales and EPS. ***(See Figure 3.5.)*** They appear frequently in the Visual Analysis section for cyclical companies. These companies do well when the economy is strong and slow when the economy is weak. The graph's growth lines sharpen and flatten roughly in tandem with the economy. Cyclical companies can make great investments when you buy at the right price. But analyzing them takes more work and knowledge of P/E valuations for cyclicals, so you should hold off until you gain more experience.

Figure 3.5: Slumping Performance



By the way, as a company grows, the numbers for its sales and EPS grow exponentially. If you were to plot these numbers on a regular graph, the growth lines would be a curve that changes continually. But the SSG is a semilogarithmic graph, with the horizontal lines representing factors of 10. This makes a steady growth rate appear as a straight line.

Spotting Trends

The SSG's Visual Analysis provides up to 10 years of sales, pre-tax profits, and EPS data. A trend line is placed to best fit all the data point for each metric and the overall rate of growth is measured. The historical growth rates for sales, pre-tax profit, and EPS can be viewed below the Visual Analysis. It's important to understand patterns in the company's past performance and to measure the relevant trends, as this will assist you in estimating future growth rates.

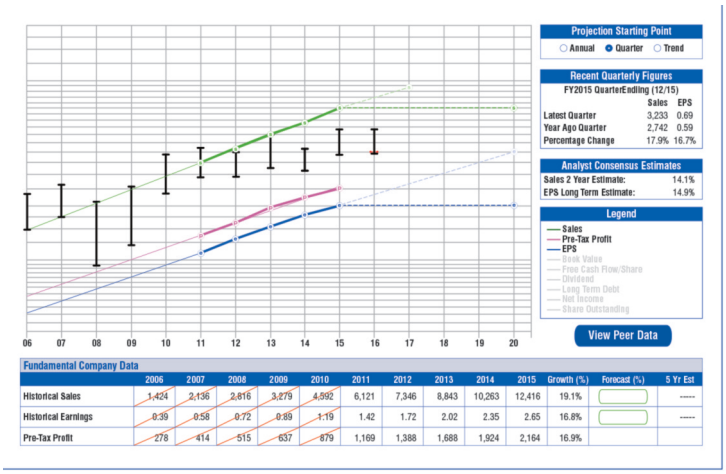
For example, if you come across a company with data points that create a curve like one half of a rainbow ***(see Figure 3.6)***, the company's growth rate is slowing. In this case you can remove the earlier years from consideration and measure only the more recent and stable growth so that you don't overestimate historical growth.

Figure 3.6: Slowing Growth — 10-Year View

Data that does not seem representative or relevant to a company's performance can be removed to measure trends that may be more sustainable. When you remove data points from the Visual Analysis section, the trend line is reset to best fit the remaining data and the growth rate is recalculated. ***(See Figure 3.7.)***

If you're a novice investor, however, severe dips in the most recent five years should disqualify a company from

Figure 3.7: Slowing Growth — 5-Year View



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Growth (%)	Forecast (%)	5 Yr Est
Historical Sales	1,424	2,136	2,816	3,279	4,592	6,121	7,346	8,843	10,263	12,416	19.1%		-----
Historical Earnings	0.39	0.58	0.72	0.89	1.19	1.42	1.72	2.02	2.35	2.65	16.8%		-----
Pre-Tax Profit	278	414	515	637	879	1,169	1,388	1,688	1,924	2,164	16.9%		

further study. The company has had problems, so it can be difficult to figure out whether it's out of the woods

Look for a company with steady upward historical trend lines.

If you're a more experience investor, recent dips are red flags. Research the company further to see whether the company has taken steps to resolve its issues.

For the first five years on a graph, deficits or severe dips might be removed from consideration if they don't recur. You can forgive a young company for a tough year or two early on. A company might run into trouble but correct the problem. Always research the cause of these issues to assess whether it will occur again.

Another factor to consider when studying trends is a company's performance in the most recent quarter compared with the same quarter a year ago. This information is included in the Visual Analysis section. Many companies perform better at certain times of the year. For example, toy stores do most of their business right before Christmas, whereas companies that sell garden supplies would have higher sales in the spring and summer. By comparing the most recent quarter with the same quarter a year ago, you compare quarters with similar business activity.

Evaluate Management

Good corporate leaders set up strategies far in advance to defend against competitive attacks while developing business opportunities where none existed before. Regardless of the strategies and tactics that these executives employ, you can assess their results with a few key metrics.

Pre-tax profit margins and percent earned on equity (aka return on equity, or ROE) tell a lot about the ability of a company's management. We also want to check the debt levels to ensure they're not excessive. The Evaluate Management section introduces these measures.

Pre-tax profit margins, referred to as % pre-tax profit on sales on the SSG, and ROE should both be stable or trend upward. Above-average figures when comparing results with those of peers indicate strong management. Upward trends indicate that management not only keeps things humming but also makes improvements as a matter of course.

Pre-Tax Profit Margins

Pre-tax profit margins represent how much of each sales dollar a company keeps before taxes, so a pre-tax profit margin of 10% means the company is keeping 10 cents (before taxes) for every dollar of sales. The SSG focuses on pre-tax profits rather than net profit margins because the government changes tax rates and there's only so much a business can do to control the taxes it pays.

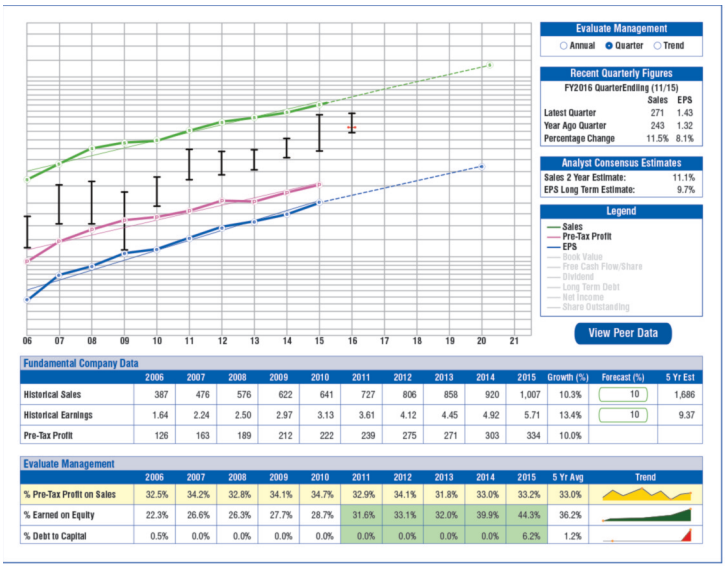
Increasing sales brings in more dollars, whereas decreasing costs reduces how many dollars are spent. Either approach increases the profit margin, but both can also lead to lower quality, weaker service, customer dissatisfaction, or ineffective operations if implemented poorly. If sales drop, cutting costs can change from cutting fat to removing meat, and a company can quickly run into trouble. Good management achieves long-term growth by balancing sales initiatives and cost controls.

Management can increase sales by expanding territory, taking market share from competitors, and increasing the price of a product. Companies must develop products of extraordinary quality to increase prices without losing market share to competition.

On the other hand, paying less for supplies and increasing production efficiency can reduce costs. Management must control or reduce overhead expenses, such as salaries and benefits, travel expenses, marketing and advertising, rent, and utilities. In many industries, such as computers or women's fashion, management has

the added burden of planning for and minimizing obsolete inventory.

Figure 4.1: Pre-Tax Profit Margins (Shaded)



The SSG presents 10 years of historical pre-tax profit margins to help investors evaluate how well management has been able to control expenses. ***(See Figure 4.1.)*** Seeing drastic changes over the 10 years might spur additional research.

The most recent five years are generally the most important ones to consider. These five years are averaged, so you can quickly compare the most recent year to the average. As you review the data, consider the following:

- In the past five years, check for any major changes in profit margins that can skew the five-year average. For example, the company might have taken actions to increase margins that provide short-term improvements at the expense of long-term performance. If the anomaly is a one-time occurrence, perhaps because of a special charge the company had to take, you can remove that data point and recalculate the average to evaluate the relevant trend. ***(See Figure 4.2.)***

Figure 4.2: Removing a Data Point From Consideration

- Typical profit margins can vary widely among industries. Operators of grocery stores, for example, typically have pre-tax profit margins in the 2%-3% range, while biotechnology companies often have margins above 20% or 30%. Compare the pre-tax profit margin with that of peers, looking for above-average margins.

- Though a steady upward trend over the most recent five years is favorable, numbers that stay the same over this time might mean that a company has cost control down to an art with little room for improvement. Holding margins steady can also be interpreted as a favorable trend.

When profit margins start to drop, the company keeps less money from each dollar of sales. This eventually reduces earnings. A declining profit margin is a warning sign that should be investigated to learn the cause of the decreased profitability.

Return on Equity

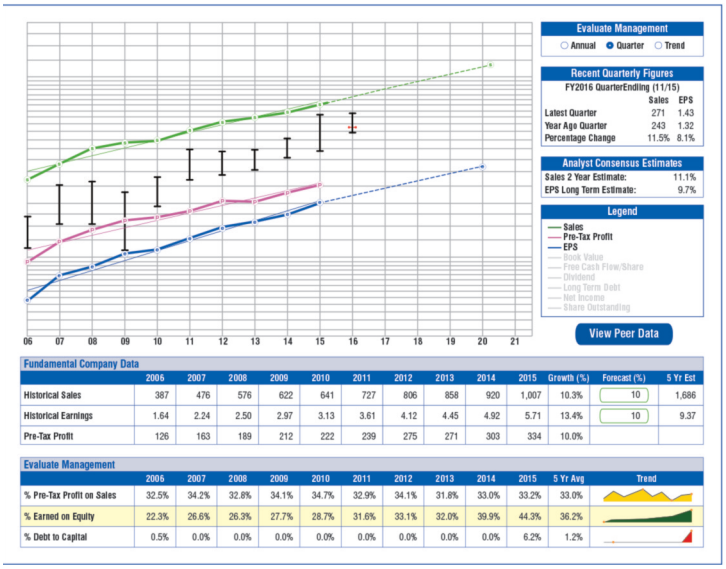
Percent earned on equity is the return that management achieves on stock investors' money, including earnings retained in the business for future growth. Shareholders' money is usually called equity, shareholders' equity, book value, or net worth. In calculating ROE, we divide earnings per share by the book value per share.

So where does this net worth come from? When a company initially issues shares of common stock, it receives cash for each share sold. This cash is listed as an asset on the balance sheet. When we subtract the company's liabilities (what the company owes) from the assets (what the company owns), we're left with what the company has been able to create using the cash shareholders gave it — and using the profits it reinvested back into the business.

In other words, ROE tells us how well management invests its money to develop new assets that grow sales and create more earnings. These investments can take many forms, such as new retail stores, new manufacturing facilities, new salespeople, and so on.

As with the pre-tax profit margins, we're focusing on the most recent five years but have 10 years of information. ***(See Figure 4.3.)*** We're looking for a trend of stable or increasing ROE, comparing the most recently completed year with the five-year average. It's also important to compare the company's results with ROEs of industry peers.

Figure 4.3: Return on Equity (Shaded)



When studying the ROE history:

- Look for ROEs of perhaps 15% and above. The best companies tend to have ROEs above this rate, with great companies often above 20%.

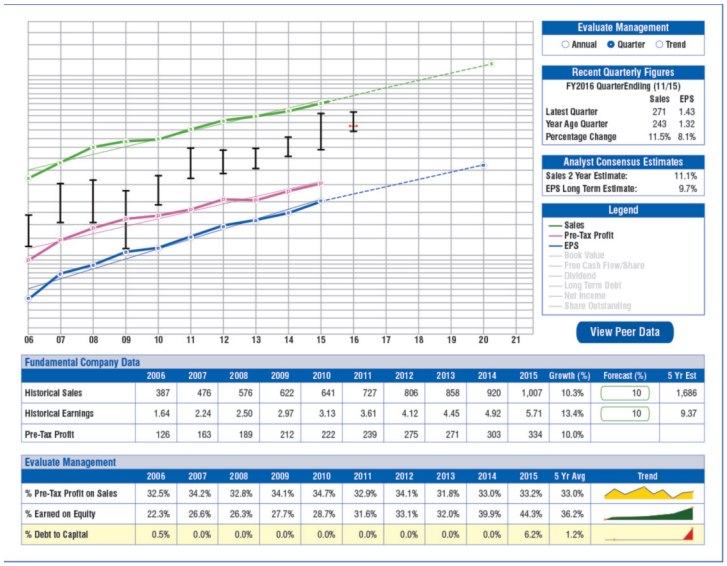
- Compare the company's ROE with those of peers.
- Smaller companies early in their history might have smaller ROEs and less consistent ROE performance as they start up a lot of new operations.
- Declining trends in ROE aren't desirable, but if the ROE is still high — say, above 20% — and above those of peers, they might be less of a concern. You'll still want to monitor the trend, however.
- There's a relationship between debt levels and ROE.

Debt to Capital

The percentage of debt to capital details the percentage of total debt relative to the company's total capitalization. ***(See Figure 4.4.)*** High debt levels are risky for companies because they have to pay their debt obligations no matter how well they're doing. Companies can run into trouble during downturns and even go out of business if they run short of cash to pay off their debt.

In general, debt percentage greater than 33% is risky. But you should compare a company's debt percentage to the industry average before deciding.

Figure 4.4: Percentage of Debt to Capital (Shaded)



Some industries, such as banks, financial institutions, and utilities, typically operate using higher levels of debt. Some successful companies in other industries have proven that they can carry high debt over many years.

Checklist for Quality

Now that you've looked over the company's Visual Analysis and Evaluate Management sections, you can assess whether you believe the company is worth further study. If it isn't, you can stop your study at this point. Consider this stage the barbed-wire fence of your study — a way to keep lower-quality companies from getting into your portfolio. Here's what to look for:

Historical sales and EPS growth:

- Increasing sales and EPS.
- Sales and EPS growing at a steady, consistent rate.
- Sales and EPS growing at about the same rate.
- Sufficient growth for the size of the company. Small companies with annual revenues of $1 billion and less, more than 12% annually; medium-size companies with revenues of $1 billion to $10 billion, between 7% and 12% or more; large companies with revenues above $10 billion, between 5% and 7% or more.
- Has growth been slowing over recent years? This is natural for companies as they get larger, but make sure growth isn't slowing too much.
- Is recent quarterly growth in line with historical growth? Check into large changes.

Percent pre-tax profit on sales (profit margin):

- Historical profit margins steady or increasing.
- Profit margins as good as or better than peers' profit margins.

Percent returned on equity (return on equity, or ROE):

- Historical ROE even or slightly increasing. Check out significant changes up or down.
- Look for companies with at least 15% ROE. Great companies often achieve ROE of 20%.
- Look for debt levels to be less than 33% of capitalization. Compare to others in the industry and to industry averages.

If the company you're studying passes this test, it's time to move on to studying whether the stock is currently selling at a price that meets your investing objectives.

CHAPTER FIVE

Forecasting Sales and Earnings Growth

We've mentioned that the SSG answers two questions: Is this a quality growth company? Is its stock selling at a reasonable price? The Visual Analysis and Evaluate Management sections help you answer the first question.

After studying these sections, answer the following questions:
Is the company growing sales and EPS at a consistent pace?
Are sales and EPS growing fast enough for a company of that size?

- Are pre-tax profit margins above the average for the industry and either stable or increasing?
- In the return on equity above the industry average and either stable or increasing?

If you don't get the answers you want for these questions, there's no need to continue your study. But if you've determined that you're studying a quality growth company, you're ready to move on to the next step: forecasting sales and earnings growth.

When fortunetellers tell you your future, they use astute observation and adroit conversation to extract those uncanny personal tidbits that make you wonder how a stranger could know so much about you. If you pay attention, you'll notice that these prognosticators don't actually do a whole lot of prognostication.

Here in the SSG you'll predict the future as well — astutely observing a company's performance and financials, extracting information from reports, and potentially engaging its investor relations folks in conversation. You'll be well-equipped to forecast a company's future.

A company's future growth is a pivotal point in a stock study. The estimated future sales growth rate drives the earnings growth rate five years into the future, which ultimately drives the future stock price. The SSG doesn't spit out future growth rates: Forecasting a future growth rate requires your judgment. Judgment requires knowledge. And knowledge requires research.

In this chapter, you'll identify the first places to go to help you in your research efforts and how to use that information to determine how a company might grow in the future.

Nowadays everyone has access to plentiful resources for homework. Websites abound with financial data and reports, news, and stock analyses. The Securities and Exchange Commission has a site at which you can access all a company's public filings. Publically traded companies also maintain webpages for investors with back-

ground, financial results, presentations, and other information. Of course, there's also your public library, which might provide access to subscription products and other unique resources.

The first source, of course, will be the Stock Selection Guide. Where in the past you had to gather the fundamental sales, earnings, profitability, price, and other information yourself and input it manually, today's SSG automatically populates the fields using a data feed updated frequently with the latest information.

The most important information about a company usually is right there on the Guide. As you read more about a company and form opinions, keep the company's history of fundamentals as displayed on the SSG top of mind.

If you don't remain focused on the SSG's fundamentals, you could easily become overwhelmed by information overload. Companies, business journalists, and analysts all have their tendencies and biases. A company's quarterly report might be viewed positively by one person and negatively by another. This is the "noise" of Wall Street. The SSG, by detailing a company's historical record of the most important fundamentals in a logical format, keeps you focused on what really matters.

Company Financial Reports and Presentations

Though you don't need to track down financial information for the SSG anymore, it's still instructive to read a company's annual and quarterly reports. Annual reports that companies produce offer a look at past performance, what the company is doing, and what company management thinks about the future. (In some cases they also include enough fluff to make some nice pillows.)

Companies also file their annual reports with the SEC as Form 10-K. But the SEC defines the format and contents of the 10-K, which can make it more difficult to gloss over issues. Quarterly reports, also called 10-Qs, provide more succinct information about events during the most recent quarter.

Some sections of annual reports offer more fodder for your growth forecasts than others do. The Letter to Shareholders is the chief executive's message to the people who own the company. Certainly, CEOs and company chairmen aren't always forthcoming about problems. But the tone and content of the Letter to Shareholders says a lot. If a company has problems, the CEO should address them and explain what the company is doing to resolve them. If everything is peachy, the CEO might talk about the plans for producing results that are more splendiferous in the future.

The annual report usually contains another section with more explanations from management. In the 10-K

look for the section titled Management's Discussion and Analysis of Financial Condition and Results of Operations. This section includes details about how the company produced its performance and, sometimes, what you can expect in the future.

At the company's website for investors you might also find presentations for analysts and potential investors. These provide much of the same background you'd find in an annual report but also could include commentary on recent company and industry developments, financial results, and future growth opportunities.

Sometimes the presentations include a company's long-term growth targets. Though there's no guarantee the company will reach these goals, you can include this information in your analysis. Annual and quarterly reports might include growth expectations as well, though quarterly reports tend to focus on short-term growth — anywhere from the next three months to 12 months.

Most companies also hold quarterly meetings with analysts to discuss the latest financial results. Recordings from these sessions might be available at the company's website, and transcripts sometimes are available at financial information sites. Executives often provide additional detail about their company's performance and future opportunities, though they're careful about what information they provide.

If you listen to a conference call replay or read the transcript, pay attention to analysts' questions. They can provide insight into company operations and industry issues. If you listen to the call, pay attention to how executives answer difficult questions. Do they answer them patiently and try to be transparent in their responses, or do they express impatience?

News & Current Company Events

Recent events are important to every stock study. Annual reports come out, well, once a year. Quarterly reports appear each quarter — every three months, give or take a day. Big things (good or bad) can happen in the time between these reports.

Good news can boost a stock's price. But bad news usually has a faster, and often more pronounced, effect on price. If a stock you're studying or watching drops in price, turn to the news to see whether it's bad (lower sales, EPS, or profit margins, or other declining fundamentals). You might find that the news is noise; the market has overreacted. In this case you've found a great opportunity to buy a great stock at a low price.

The typical "noise" of the Street includes:

- Negative or positive opinions of a stock published by traders who stand to benefit from the stock's

short-term price movement based on their opinions.

- Analyst upgrades and downgrades of short-term price movement.
- Sunny profiles of company executives in financial magazines.

There are countless sites offering the latest business news. In addition, at some sites such as Google, Bing, and Yahoo! Finance you can create watch lists regarding news on any company that interests you.

Analyst Reports

Commentary by stock analysts can be helpful. They're often experts in the industries they cover and understand the competitive landscape. Analyst reports can detail and provide context for a company's business model for earning profits, performance, potential or present problems, productive steps, and opportunities.

You might assume that analyst reports are difficult to obtain, but it's easier than you think. Brokerages often have them available for clients. Morningstar, Standard & Poor's, and Value Line are among the companies that provide subscription-based analysis. Many libraries subscribe to these reports; ask your local library whether it has access to any of them.

The commentary also usually includes the analyst's forecast. You should take the forecast with a grain of salt, however. Analysts tend to be optimistic, so glowing reports might not turn out to be as bright as you might hope. Analysts usually offer a buy-hold-sell recommendation as well, which you should ignore. These recommendations are for the short term instead of for the next five years, which is your timeline.

Other reasons to be skeptical of analyst reports:

- Analysts can have conflicts of interest that skew their reports. For example, if another part of an analyst's firm solicits business from companies covered by the analyst, he might be pressured to write positively about these companies.
- Analysts can have a herd mentality and parrot the views of other analysts.
- Not all analysts are experts on the companies they cover.

Research Guidelines

Here are some guidelines to help you prepare to make reasonable estimates regarding the future sales and earnings growth rates of a company.

- How does the company generate revenue (sales)?
- What is the company doing to increase revenue?

Typical ways of increasing sales are:

- Creating new products and services.
- Finding new customers for current products. This can occur, for example, when a company that sells software to banks decides to sell the same product to hospitals.
- Growing the territory in which it sells — for example, when a clothing retailer with stores only in Florida builds new stores in Georgia.
- Acquiring other companies.
- Raising prices.
- Introducing promotions that spur customers to buy more of the company's products and services.

After you understand how the company generates sales, what it has done to grow sales in the past, and how it plans to expand sales in the future, decide whether the company is likely to continue its growth or slow down (sales growth usually doesn't increase). To do this you'll need to understand risks facing the company. Threats such as new competition or expiring patents (allowing other companies to offer the same products) might dampen growth in the future.

As you learn more about a company, you'll have additional questions regarding growth. Use the sources described in the previous section to find your answers. Here are some examples:

- How much does the company spend on R&D?
- How much revenue comes from recent products or services?
- Does the company have patents about to expire?
- Is the management that produced growth still in place? How close are executives to retirement?
- How much competition does the company have? Should it expect more or less in the future?
- Has the company increased its market share?
- How much does the company grow by acquiring other companies versus introducing new products and services and raising prices? Will the company be able to continue growing through acquisition?
- Is the company reducing expenses to improve profit potential?
- Is the company buying back shares, which reduces the number of shares dividing up the earnings? Say a company in 2015 had $300 million of earnings divided by 100 million shares. EPS was $3. In 2016 the company buys back 50 million shares, leaving 50 million shares outstanding, while again earning $300 million. The EPS for 2016 would be $6.
- Does the company tax rate fluctuate? To what degree?

Estimating Future Growth Rates

Now that you've researched a company, it's time to determine its sales and earnings growth rates for the next five years. The history you see in the SSG's Visual Analysis helps, but you need additional information to determine whether that growth will continue. You have to get to know the company.

Estimating Sales Growth

We start with the sales growth rate because earnings come from sales, and it's the earnings growth that will drive a stock's price over the long term. When you subtract expenses from sales, what's left is the pre-tax profit. When you deduct taxes from the pre-tax profit, you have a company's total earnings. When you divide total earnings by the number of shares outstanding, you'll determine earnings per share.

Let's say a company had 2015 sales of $1 billion, expenses of $600 million, taxes of $100 million and 100 million common shares outstanding. What was its 2015 EPS? Here's the math:

$1 billion (sales)
– $600 million (expenses)
= $400 million (pre-tax profit)
– $100 million (taxes)
= $300 million (earnings)
÷ 100 million (common shares outstanding)
= $3.00 EPS

To determine a company's future sales growth rate, you'll use what you learned from your research to determine what contributed to its growth in the past: products, good management, acquisitions, and so on. You'll also take a look at the strength and consistency of the company's historical sales and earnings. The consistency of historical sales and earnings growth is critical when you begin to make assumptions about the company's future growth potential. Without consistency it becomes next to impossible to make "reasonable" assumptions.

After you've completed your research, you'll have several numbers to consider. For sales growth the numbers include:

- The 10-year historical growth rate.
- The historical growth rate in more recent years, such as the past three or five years.
- The historical growth rate in the most recent quarter compared with a year ago.
  If it's a lot lower than the historical rate, you might want to be more conservative in your estimate.

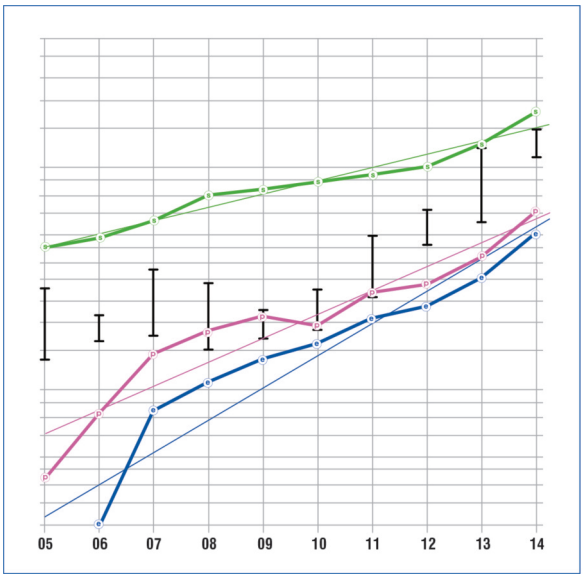
- Analysts' expected sales growth for the next year or two. (Reports from Value Line, Morningstar, and some individual analyst reports often provide sales growth expectations for the longer term.)

Let's take a look at a fictional company, Janke Golf, which develops and sells clubs and other equipment for golf. The company's historical sales growth is about 9%. ***(See Figure 5.1 .)*** Janke Golf produces several popular clubs, such as its Spartan driver. In addition, management has announced plans for new product lines for the next five years, which means the company should be able to continue its current growth.

Figure 5.1: Janke Golf: Consistent 9% Sales Growth

Since Janke Golf has grown sales consistently for the past 10 years and there's no discernable deviation from the trend, you can usually assume that the historical trend will continue. In this case you might simply use the historical growth rate for the estimated future growth rate. If you wanted to be more conservative, you could make a slight downward adjustment. In both cases you'd be making a reasonable estimate.

Figure 5.2: Irregular Growth History

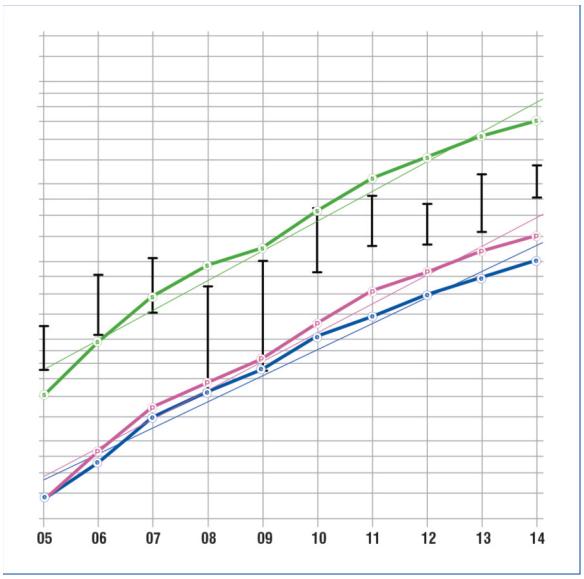


Irregular growth: If sales numbers skitter above and below the trend line ***(see Figure 5.2)***, it's time to ratchet up your research and try to discover what caused the deviations from the trend. It's more challenging to forecast future growth when history is more erratic, but your research and analysis will lead you to a reasonable growth rate to estimate for the next five years. Your estimated growth rate should be no higher than the historical growth, and you may want to reduce that value a bit to buffer against a company's unpredictability.

Slowing growth: If growth is slowing ***(see Figure 5.3)***, don't use the 10-year average growth for your estimated future growth rate. Check the growth rate

in the more recent years and determine whether there's a period of stabilizing growth in the recent years. Select a reasonable rate supported by this historical data and your research. Also, look at the growth rate in the recent quarterly figures box in the Visual Analysis section. If the growth rate has slowed further, be even more conservative with your estimate. For example, if a company's growth has slowed from 25 percent over 10 years to 15 percent for the past three years, and 12 percent in the most recent quarter from the year-ago quarter, you might want to estimate future growth at 10 percent or below.

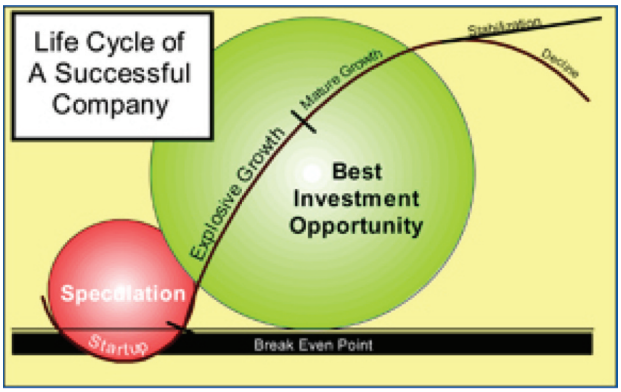
Figure 5.3: Slowing Growth History



Some investors might be turned off by a slowing growth rate, but this is a natural progression for all companies as they go from small to medium to large in size. All companies go through a life cycle. Successful ones begin with a startup stage where they're losing money, enjoy high growth as they build sales and eventually earn profits, continue to grow at a strong but slower rate as they mature, and finally reach a level of stable but lower growth rates. ***(See Figure 5.4.)***

Even companies with the best management will see slowdowns in growth because of the difficulties in maintaining growth rates over the long term. In fact, it's difficult for companies to maintain growth rates above 15% for a long time. Keep that in mind when making your forecasts.

Figure 5.4: Life Cycle of a Successful Company



There's no right or wrong answer here, but based on your research you will quickly identify a range that would be considered reasonable. Your forecast should bear some relationship to historical rates. For example, if the company has grown revenues by 5% each year over the past 10 years, it's unlikely to grow revenues by 20% a year for the next five years.

You'll then add your estimate to the Estimated Future Sales Growth field. Before you proceed to estimating

future EPS growth, consider whether the estimated future sales growth rate is sufficient for a company of its size. As stated in Chapter 1, we're looking for:

- An annual growth rate of at least 12% for companies with sales of $1 billion and less.
- An annual growth rate of 7% to 12% or more for companies with sales between $1 billion and $10 billion.
- An annual growth rate of 5% to 7% or more for companies with sales exceeding $10 billion.

Estimating Future EPS Growth

In many cases, you'll want to estimate an EPS growth rate that's similar to sales. It's true that companies can grow EPS faster than revenues, and you'll often see this occur with smaller companies. If you review the discussion of how sales become earnings, you'll note some ways to do this:

- They can reduce expenses.
- They can sell more of the products carrying higher margins while selling less of the lower-margin products.
- They can buy back shares, which reduces the number of shares dividing up the earnings. Say a company in 2015 had $300 million of earnings divided by 100 million shares. EPS was $3. In 2016 the company buys back 50 million shares, leaving 50 million shares outstanding, while again earning $300 million. The EPS for 2016 would be $6.
- They can have a lower tax rate.

These activities cannot continue forever, however. For example, a company can keep lowering costs but eventually will run out of expenses it can cut without harming sales. At some point EPS growth will drop to the same or lower rate than sales.

In developing an EPS growth forecast, you can evaluate many of the same types of figures you did when estimating sales growth:

- The 10-year EPS growth rate.
- The EPS growth rate in more recent years, such as the past three or five years.
- The EPS growth rate in the most recent quarter compared with a year ago. As with sales, if the rate is a lot lower than the historical level, you might want to be more conservative in your estimate.
- Analysts' expected EPS growth rates. Most analysts look out only a year or two, but some provide longer-term forecasts. You can find them in Value Line reports, for example. You can also research what are called analysts' consensus estimates, or ACE, for individual stocks at Yahoo! Finance, Reuters, Zacks, and other financial information sites.

The Preferred Procedure

Another way to project earnings is to walk through the Preferred Procedure, which takes you step by step from estimated sales growth to an EPS forecast. You apply estimates for a company's future profit margins, tax rates, and the number of common shares outstanding to determine the future EPS.

You can apply judgment to each step of the Preferred Procedure to home in on future EPS. For example, if the pre-tax profit margin has been dropping steadily, you can use a lower value to calculate the pre-tax profit. If the tax rate or number of shares has been increasing, you can adjust those numbers to calculate the EPS.

Figure 5.5: Preferred Procedure Calculation

Restore Defaults	Defaults	Judgments	Result
Projected 5 Year Sales Growth Rate (Your Forecast):	7.0%	7	16,441
Less Expensese (5 Yr Avg % Pre-Tax Profit Margin:	12.6%	13.5	-14,221
Less Taxes (Last Yr Tax Rate):	37.7%	37.7	-837
Less Preferred Dividends (Current Pref'd Div):	0.0	0.0	0
Projected 5 Yr Total Earnings:			1,383
Divided by Shares Outs. (Current Dil. Shares M):	404.5	400	3.46
5 Year Compounded Annual EPS Growth Rate:			7.1%

BetterInvesting's SSG applications will do the math for you after you plug in your forecasts. Your starting point is the estimated future sales. Based on your estimated rate, you'll see the expected sales figure in five years. Follow along with our example for Janke Golf ***(see Figure 5.5)*** for the rest of the process.

1. We've estimated Janke Golf's sales growth rate at 7%. This results in sales five years from now of $16.4 billion.

2. Now we want to deduct the expenses from sales. We start with the five-year average pre-tax margin of 12.6%. We notice the increasing pre-tax margins and researched why this occurred. The margins have been increasing because the company is selling more drivers, which have higher margins, and selling fewer lower-margin putters. We assess that this trend will continue in future years and assume that the margin will be higher over the next five years at 13.5%, the rate in the most recent year. (We don't take this decision to increase the expected margin lightly — it's usually aggressive to forecast higher margins.) Notice that we're starting with the margin. To figure out what the expenses will be, we'll subtract the margin from 1. So 1 – 13.5% = 86.5%. When we multiply 86.5% by the expected sales five years from now, we end up with $14.2 billion in expenses.

3. That leaves us with about $2.2 million in pre-tax profits in five years. We then take out taxes. In this case our starting point is 37.7%, the rate in the most recent year. We believe this is a

reasonable future rate. To determine what's left after taxes, we'll first subtract the tax rate from 1. So 1 – 37.7% = 62.3%. When we multiply the $2.2 billion in pre-tax profits five years from now by 62.3%, we end up with almost $1.4 billion in earnings five years from now.

4. Finally, we divide the earnings by the expected number of shares. Our starting point is the current number. We notice that shares outstanding have decreased steadily over the past 10 years, however, and forecast that shares will stand at 400 million in five years.

5. When projected earnings are divided by projected shares, we end up with projected EPS of $3.46 in five years. (*See the example in the Estimating Future EPS Growth section for how the math works.*) That's an increase of 7.1% a year for the next five years.

Aren't you glad the SSG applications do the math for you? The Preferred Procedure can help you reaffirm your EPS forecast. Though you should be very cautious about estimating EPS growth that's higher than sales growth for the next five years, if you do so the Preferred Procedure will help you understand why you believe this will be the case.

Add your estimate for EPS growth to the Estimated Future Earnings Per Share Growth field. As you did with sales growth, consider whether the estimated future EPS growth rate meets your goal for a company of its size.

The EPS growth rate you enter will lead to expected EPS in five years. The expected EPS will play a critical role in determining the potential high price in five years.

Success Tip: Put It in Writing

You need to be able to support the estimates you make with reason. We suggest you write down the reasons for your estimates on paper or use the Notes feature in the BetterInvesting online applications so that you can revisit them in the future to see how your reasoning stood up to reality. Doing this is where the real learning takes place and helps to greatly improve your ability to make reasonable estimates in the future.

Studying the Price-Earnings History

By this time in your study you've determined the following:

- That you're studying a quality growth company.
- The expected sales and EPS growth rates of the company over the next five years.
- The EPS five years from now.

Now you'll begin determining whether the stock is selling at a reasonable price. The first step is to study the company's historical price-earnings ratios so that you can begin to develop reasonable assumptions as to what the average high and low P/E may be in the next five years. You need to make estimates for the future average high and low P/Es to ultimately calculate the potential future high and low price of the stock. The calculation for a potential high or low price looks like this:

P/E x EPS = Price

The P/E quantifies how a stock is valued by the market and is used as one way to measure whether a stock is fairly valued. The P/E, also called the valuation or multiple, divides the stock's price by the EPS. The ratio is the price investors are willing to pay for each dollar of EPS. For example, if a stock's price is $50 per share and the EPS is $5, the P/E is 10.

We look at the P/E because it allows us to study stocks on a more apples-to-apples basis, especially competitors. Stock prices range from pennies to thousands of dollars per share. If Widget Inc.'s stock is selling for $10 per share and Guns and Butter Corp.'s stock is selling for $1,000/share, comparing P/Es allows us to have more perspective on how investors truly value the stocks.

At first glance you might believe that Widget's $10 stock is less "expensive" than Guns and Butter's stock. But comparing P/E ratios might change your mind. For example, say the stock selling at $10 has EPS of $0.50. The P/E here is 20. Meanwhile, the $1,000 stock has EPS of $100. The P/E is 10 — half the valuation of the $10 stock.

The two companies are in different industries, so the fact that they have vastly different P/Es is neither good nor bad. Industries with rosy prospects command higher P/Es, whereas industries with slower or erratic growth tend to have lower P/Es. Comparing the company's P/E to the average P/E for the industry can show whether the company is popular within the industry and tells whether the stock is "pricey" compared with its competitors.

The P/E ratio seems like a quantitative measure, but it actually says a lot more about investor sentiment than anything else. The more optimistic investors are about the company's future prospects, the more they might pay for each dollar of today's earnings.

A company's P/E tends to stay within a given range, partly owing to the company's prospects and partly because of the company's quality and growth. But P/Es are always changing and can go to extremes at times. In the heat of a bull market, P/Es can go sky high. They eventually fall back to earth when reason takes hold. Sometimes they go way below sea level when panic seizes the market before rising back up to their historical averages.

For example, stocks in the Standard & Poor's 500 index, which is composed of the largest stocks in the U.S., historically have traded at an average P/E of around 16. But over time the S&P 500's average P/E has cycled up and down, ranging from under 10 — even dropping to 6.6 in 1949 — to the 30s and beyond.

As profitability increases, so does the return shareholders earn from their ownership in the company. Investors want to own that company, competing in an open market, bidding higher and higher to buy the stock, driving the price up. Have the earnings increased during this short feeding frenzy? No. The price increase was only because of activity in the open market. So the P/E ratio increases as the price increases, showing the demand for the stock. Conversely, when a company's EPS drops, sellers try to sell their shares, but fewer people want to buy the stock. The price drops until someone buys, lowering the P/E at the same time.

Studying the P/E History

By studying the five-year history of P/E ratios in SSG's Price-Earnings History section, you can forecast the direction of a stock's P/Es. ***(See Figure 6.1.)*** You'll use the information gleaned from the P/E history to forecast the future high and low P/Es for the next five years. These estimates will be critical in determining the potential future high and low prices in the SSG's Evaluating Risk and Reward section.

Figure 6.1: Price-Earnings History

CLOSING PRICE (02/01/16): 56.76 **HIGH THIS YEAR:** 57.19 **LOW THIS YEAR:** 43.47

	A	B	C	D	E	F	G	H
Year	**Price**		**Earnings**	**Price Earnings Ratio**		**Dividend**	**% Payout**	**% High Yield**
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2010	16.9	11.2	1.16	14.6	9.7	0.16	13.8%	1.4%
2011	26.4	16.1	1.43	18.4	11.3	0.22	15.4%	1.4%
2012	35.4	25.5	1.77	20.1	14.4	0.28	15.9%	1.1%
2013	41.0	27.4	1.94	21.1	14.1	0.34	17.5%	1.2%
2014	48.9	30.9	2.21	22.1	14.0	0.40	18.1%	1.3%
AVERAGE		**22.2**		**19.3**	**12.7**		**16.1%**	
CURRENT/TTM			**2.45**			**0.47**	**19.2%**	
AVERAGE PRICE EARNINGS RATIO: 16.0					**CURRENT PRICE EARNINGS RATIO: 23.1**			

Show / Hide Price/Earnings Chart View Peer Data

In the Price-Earnings History section, your eyes will probably go directly to columns D and E. These are the annual high and low P/Es for the five most recently completed years.

Each column in the section has a letter to identify it. The header for each calculated column shows the formula for the calculation using those letter identifiers. The numbers used for the P/E calculations come from columns A, B, and C.

The header for each calculated column also shows the formula for the calculation using those letter identifiers. The math is simple, and BetterInvesting's tools perform the calculations for you. For a given year's annual high P/E, we divide the high price for the year in Column A by the EPS in Column C. For the annual low P/E, we divide the low price in Column B by the EPS.

The high P/E is really an approximation. It is the highest price for the stock during the year divided by the EPS for that year. But the stock reached its highest price before the company ever reported the EPS you use.

The low P/E is calculated by dividing a year's low price (Column B) by that year's EPS (Column C). As with the high P/E, the low P/E is also an approximation.

At the end of the high and low P/E columns you'll see the five-year averages. You'll employ all this data to help you forecast the average high and low P/Es you expect to see over the next five years. You'll use these projections in the next section to determine a stock's potential price range for the next five years.

Detailing Dividends

This section also provides information about the company's dividends, if it pays them. Dividends, the portion of profits (or sometimes out of reserves) paid regularly to shareholders, can be an important component in a stock's total potential return. Dividends per share are detailed in Column F.

The percent payout in the next column, also known as the payout ratio, is the percentage of earnings that the company pays to shareholders as dividends. It's calculated by dividing the dividend per share by the EPS for a given year and multiplying the result by 100.

If you're looking for steady income to pay bills during your retirement, you might get excited about dividends. For investors who prefer to watch the stock price go up, a higher payout might not be so welcome.

Remember, the stock's price follows earnings growth over the long term. When a company is using profits to pay dividends to shareholders instead of employing that money to build new facilities, develop new products, hire more employees, and so on, earnings growth could curtail. When a company distributes a large portion of earnings as dividends, it could be a signal that company is in a mature phase of its life cycle, when growth is

slower. A dramatically increasing payout ratio might be a red flag that a company is trying to hang on to shareholders by pumping up dividends.

Some low-growth industries such as utilities traditionally pay out high dividends. Fast-growing companies and industries where research and development are critical often keep profits in the company to fuel growth.

We should point out that dividends can also be quite beneficial to shareholders even if they aren't relying on them for regular income:

- Companies with a history of paying growing dividends are communicating confidence that they'll continue growing earnings.
- Dividends also provide investors confidence that the company isn't cooking the books; after all, dividends can't be paid with fake money.
- Dividends provide additional stability to a stock's prices (we'll discuss this a bit more in Chapter 7). In a declining stock market, a dividend helps support the price of the stock. A sizable number of investors value dividends and step in during a declining market to buy stocks that reach a yield they consider favorable.
- When the stock market is flat or down, dividends provide some return to shareholders.

The percent high yield in Column H represents the percentage of dividends the company pays relative to the lowest stock price during that year. The high yield is calculated by dividing the dividend per share (Column F) by the low price (Column B). For stocks that pay a high yield, attracting investors who value dividends, this information is useful in determining a potential low price in the next section.

Other information in the Price-Earnings History section, much of which is used later in the SSG, is:

- The stock price at the time of your study.
- The 52-week high and low prices.
- The trailing-12-month (TTM) EPS. In this case the SSG adds up the EPS for the company's most recent four quarterly reports. If you're studying the company in November, for example, the TTM earnings might include three quarters of EPS from the current year and the EPS from the last quarter of the previous year.
- The average P/E over the last five years, taken from the five-year average high P/E and the five-year average low P/E. This provides a comparison point for the current P/E, acting as a barometer.
- The current P/E. This is the current stock price divided by the TTM EPS and is sometimes called the trailing P/E. Some investors and analysts employ a projection for EPS for the next 12 months in calculating the current P/E; that's called a forward P/E.

Throwing Out Numbers

Just as some years in the Visual Analysis graph don't reflect a company's usual performance, some values in the Price-Earnings History section might misrepresent typical P/Es for the company. Because the average high and low P/E ratios are some of the information you'll use to estimate potential high and low prices five years out in the Evaluating Risk and Reward section, make sure that those averages are reasonable and conservative. For example, you might choose to eliminate P/Es that are significantly higher or lower than others. The P/Es also might trend one way or the other, indicating that future values might not match those in the past.

Figure 6.2: P/E History With 2013 Values Included

CLOSING PRICE (02/01/16): 61.41 **HIGH THIS YEAR:** 64.00 **LOW THIS YEAR:** 42.05

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	21.0	12.7	0.81	26.0	15.7	0.26	32.1%	2.0%
2012	31.0	17.6	0.90	34.6	19.6	0.34	38.0%	1.9%
2013	38.9	22.1	0.01	7,784.5	4,427.0	0.42	7714.9%	1.9%
2014	41.3	34.0	1.35	30.4	25.1	0.52	38.4%	1.5%
2015	59.3	35.4	1.82	32.6	19.4	0.64	35.1%	1.8%
AVERAGE		24.3		1,581.6	901.4		1571.7%	
CURRENT/TTM			1.63			0.80	49.1%	
AVERAGE PRICE EARNINGS RATIO: 1,241.5					CURRENT PRICE EARNINGS RATIO: 37.7			

Show / Hide Price/Earnings Chart View Peer Data

If you decide that certain P/Es are unreasonably out of line, you can delete them and the five-year average will adjust accordingly. For example, take a look at ***Figure 6.2***. Notice the P/Es for 2013: a high of 7,784.5 and a low of 4,427. Those values throw the five-year averages out of whack. If you delete those numbers from consideration, the averages drop to a much more reasonable 30.9 for the high P/E and 19.9 for the low P/E. ***(See Figure 6.3.)***

Figure 6.3: P/E History With 2013 Values Removed

CLOSING PRICE (02/01/16): 61.41 **HIGH THIS YEAR:** 64.00 **LOW THIS YEAR:** 42.05

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	21.0	12.7	0.81	26.0	15.7	0.26	32.1%	2.0%
2012	31.0	17.6	0.90	34.6	19.6	0.34	38.0%	1.9%
2013	38.9	22.1	0.01	~~7,784.5~~	~~4,427.0~~	0.42	7714.9%	1.9%
2014	41.3	34.0	1.35	30.4	25.1	0.52	38.4%	1.5%
2015	59.3	35.4	1.82	32.6	19.4	0.64	35.1%	1.8%
AVERAGE		24.3		30.9	19.9		1571.7%	
CURRENT/TTM			1.63			0.80	49.1%	
AVERAGE PRICE EARNINGS RATIO: 25.4					CURRENT PRICE EARNINGS RATIO: 37.7			

Show / Hide Price/Earnings Chart View Peer Data

By the way, how did those 2013 P/Es occur? The table provides the answer. In Column C, you can see EPS in 2013 was a penny compared with $0.90 the year before. Remember the equation for P/E: the stock's price (the denominator) divided by EPS (the numerator). In this case not only did the EPS decrease but also the stock's low and high annual price increased. As an investor, you would want to explore why the EPS plummeted and why the stock price didn't drop as a result.

Selecting High and Low P/Es

Now that you've studied the P/E history, you'll need to determine what you think the average high P/E and

average low P/E for the next five years will be. You'll use these values in the Evaluating Risk and Reward section.

If P/Es are steady, it might be a simple matter of using the SSG's averages. When numbers jump out as not fitting with the stock's history, as we saw in Figure 6.2, you can remove them from consideration. Sometimes trends in the P/E values emerge as well.

Descending P/Es: When P/E ratios start to drop, the average high and low P/Es might not be representative of P/E ratios to come. To be conservative when P/Es are steadily decreasing, choose P/Es that are equal to or less than the P/Es in the most recent year. If you think the situation will get even worse, you might lower your expected P/Es even more.

Ascending P/Es: You might be tempted to forecast P/Es continuing to increase when you a rise in P/Es, but be cautious. When P/E ratios are increasing, the average high and low P/Es are the conservative choice. Although P/E ratios are headed up, they can't continue in that direction forever. The average high and low P/Es in this case will be less than the most recent year's P/Es.

Elevated P/Es: What do you do with P/Es that are outrageously high? In short, lower them. Is an average high P/E of 50 reasonable? Or is it the result of market optimism, irrational exuberance, current industry favoritism, or some other short-term effect? Many longtime BetterInvesting members set personal guidelines for P/E ratios. Based on years of experience, these successful investors limit the P/E ratios they use to no higher than 30. For beginners, these guidelines keep your studies conservative. You might not find as many stocks to buy, but the ones you do buy stand an excellent chance of meeting your expectations.

Finally, remember that P/Es are cyclical. When we're in a bull market, you can see higher P/E values for all stocks, just as a bear market punishes P/Es for all stocks. The bull market that began in 2009 is one of the longest ever, and the P/E for the S&P 500 index in 2015 was around 19 compared with a long-term historical average of about 16.

When P/Es overall are high, using the average P/E ratio for the past five years is a more conservative number that can protect you from the temptation of expecting fabulous performance to continue forever. The average P/E is a step toward recognizing that investors won't continue to pay inflated P/Es.

Make sure to spend a good amount of time studying P/Es. In the next chapter, you'll learn how to use your expected high and low P/Es to develop a potential price range for the stock, which will indicate whether the current price for the stock is reasonable.

Evaluating Risk and Reward

So far the SSG has required you to make four judgments:

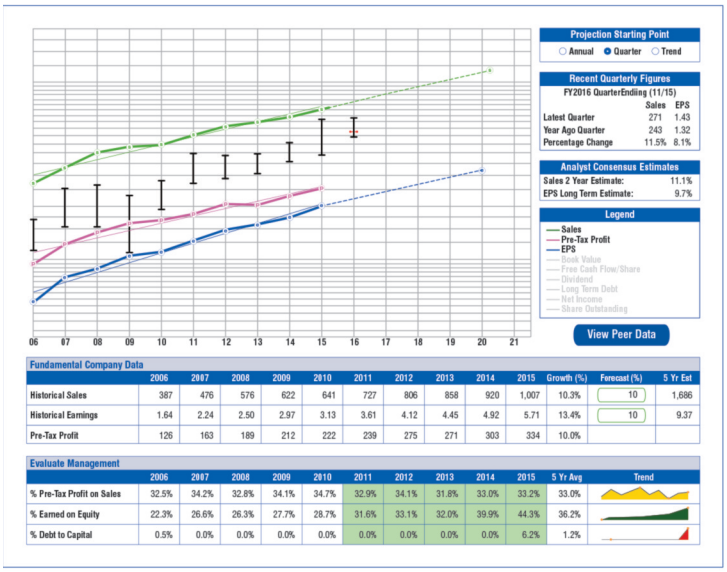
- The future annual sales growth.
- The future annual EPS growth.
- The future average high P/E.
- The future average low P/E.

These judgments will all come together in the SSG's Evaluating Risk and Reward section. In this section you'll learn where the stock's current price is relative to the high and low price the stock may reach in the next five years, which will determine the potential risk and reward for investing in it.

Risk and reward are forces you must balance if you are to invest successfully. As we've discussed, you can't eliminate risk in investing. Money in your mattress might burn in a fire, and it will almost certainly lose its purchasing power over time owing to inflation. The only solution is to manage the risks you must take in building wealth.

You can reduce your risks by focusing on quality growth companies with excellent management; these companies have a history of producing the earnings growth that leads to higher stock prices and have leadership that can keep the company on course during difficult times. Using conservative judgments also reduces your chances that you overpaid for a stock.

Figure 7.1: O'Hara Cruises Visual Analysis



A stock must offer enough potential reward to offset the risks it carries. For example, large, mature companies frequently grow slow and steady — nothing too exciting but dependable as all get out. These companies still carry some risk, but it's at a level that allows you to sleep at night while realizing some return, perhaps 7% to 10% annually. Small companies, on the other hand, can face endless dangers —

inexperienced management, competition, new technology, obsolescence, and various uncertainties. You must demand more from these riskier investments. The higher the risk, the higher the return you should expect. With higher returns, your winners can offset the investments that didn't pan out.

We'll walk through a fictional company, O'Hara Cruises, as an example in this chapter. Let's say we've already done the following:

- Studied the company's Visual Analysis and Evaluate Management sections to determine that this is a well-managed, quality company growing sales and earnings consistently at a suitable pace for its size. Pre-tax profit margins and ROE are strong and steady or increasing. ***(See Figure 7.1.)***

- Noted the steady rate of sales growth, conducted research, and projected that the company will continue to grow at 10% annually for the next five years.

- Studied O'Hara Cruises' histor ical EPS growth as well as recent results, projecting that EPS will grow by 10% annually for the next five years. This results in an EPS of $9.37 five years from now. The projected sales and earnings growth rates are suitable for a medium-size company.

- Forecasted that the average high P/E over the next five years will be 27.9 and that the average low P/E during this time will be 20.0, based on the consistent figures in the Price-Earnings History section. ***(See Figure 7.2.)***

Determining the Reward: The Potential High Price

The SSG's Evaluating Risk and Reward section focuses on the magnitude of the risk and the reward by investing in this stock today. It asks two questions: What is the potential high price for this stock? and If the stock price drops, how far might it fall? ***(See Figure 7.3.)***

Figure 7.2: O'Hara Cruises P/E History

CLOSING PRICE (02/01/16): 149.83 **HIGH THIS YEAR:** 177.28 **LOW THIS YEAR:** 139.01

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	112.4	76.2	3.61	31.1	21.1	1.00	27.7%	1.3%
2012	109.2	80.9	4.12	26.5	19.6	1.16	28.1%	1.4%
2013	111.6	86.9	4.45	25.1	19.5	1.32	29.7%	1.5%
2014	129.3	101.1	4.92	26.3	20.5	1.48	30.1%	1.5%
2015		110.8	5.71	30.5	19.4	1.66	29.1%	1.5%
AVERAGE		91.2		27.9	20.0		28.9%	
CURRENT/TTM			5.82			1.76	30.3%	
AVERAGE PRICE EARNINGS RATIO: 24.0					CURRENT PRICE EARNINGS RATIO: 25.8			

Show / Hide Price/Earnings Chart View Peer Data

The high price for the next five years is an estimate of how high a stock's price might reach at any time during that period. It doesn't tell you when the stock might reach that price, or the path it

will take to get there. Instead, it's a rough estimate of the reward you'll reap if matters go as you forecast in your stock study. The High Price–Next 5 Years line on the SSG employs two figures: your selections for the average high P/E and the estimated high EPS you selected.

Remember, the SSG calculates what the EPS will be five years from now using your annual EPS growth projection. In this case, the starting point is $5.82. That number is in the Price-Earnings History section in the Current/TTM line. Five years from now, $5.82 compounded by 10% annually equals $9.37.

So for O'Hara Cruises:
Average High P/E (27.9)
x High EPS ($9.37)
= $261.30

Figure 7.3: Evaluating Risk and Reward for O'Hara Cruises

A. HIGH PRICE – NEXT 5 YEARS

Avg. High P/E: **27.9** x Estimate High Earnings / Share: **9.37** = Forecasted High Price: **261.3**

B. LOW PRICE – NEXT 5 YEARS

(a) Avg. Low P/E: **20.0** x Estimate Low Earnings / Share: **5.82** = Forecasted Low Price: **116.4**
(b) Avg. Low Price of Last 5 Years:
(c) Recent Market Low Price:
2014 Low Stock Price: **101.1** 52 Week Low Price: **139.0**
2015 Low Stock Price: **110.8**
(d) Price Divident Will Support: Indicated Dividend / High Yield = 1.76 / 1.5% = **115.8**

Selected Forecasted Low Price: **116.4**

C. ZONING using **25%-50%-25%** (click to toggle)

Forecast High Price: **261.3** Minus Forecast Low Price: **116.4** = **144.9** Range. 25% of Range: **36.2**

Buy Zone:	**116.4**	to	**152.6**
Hold Zone:	**152.6**	to	**225.1**
Sell Zone:	**225.1**	to	**261.3**

Closing Stock Price of **149.83** is in the **BUY** Zone.

Show / Hide Gain vs Loss Chart

D. UPSIDE DOWNSIDE RATIO (POTENTIAL GAIN VS. RISK OR LOSS)

Forcasted High Price – Closing Price / Closing Price – Forcasted High Price = (261.3 – 149.83) / (149.83 – 116.4) = 111.46 / 33.43 = **3.3 to 1**

E. PRICE TARGET (Note: This shows the potential market price appreciation over the next five years in simple interest terms.)

Forcasted High Price / Closing Price = 261.3 / 149.83 = (1.7439 x 100) / 33.43 = (1.7439 – 100) = **74.4% Appreciation**

(If you're using a calculator to test the calculation, you might see a very slight difference between your number and the one here. That's because the SSG performs some rounding in the background.)

Determining the Risk: The Potential Low Price

The Low Price: Next 5 Years portion provides an estimate of how low the stock price might drop during that period. Although the high price uses one approach, there are four methods for determining the possible low price — each one appropriate for a different type of company or situation. The one at the top, Low Price – Next 5 Years, is the one you'll likely want to focus on.

Average Low P/E x Estimate Low Earnings/Share: The low price determination method for growth companies appears first because it's used most often. Almost the mirror of the calculation for high price, low price five years out is your estimate of the average low P/E during the next five years multiplied by the lowest EPS expected for that period.

The figure for the lowest EPS comes from the Price-Earnings History section. It's the EPS for the most recently completed year. The assumption is that a growth company will continue increasing EPS year by year, so the low point is the current year.

Many SSG users choose to give the company credit for recent growth by using the total EPS for the past four quarters. As we've mentioned previously, for O'Hara Cruises the figure is $5.82. Multiplying the projected average low P/E of 20.0 by $5.82 yields a potential low price of $116.40.

Avg. Low Price of Last 5 Years: The average low price of last five years is best suited for studying cyclical and volatile companies. Business cycles in the past lasted about five years, so the average low price of the last five years represents a low price during the next business cycle. Business cycles can run longer or shorter, so you must judge whether the recent low prices truly represent the lows of an entire business cycle.

Recent Market Low Price: The recent severe market low is useful for volatile companies. The low price of a volatile company during a serious market drop is a good indicator of the potential low price when the market takes another hit. You can select the low price of two years ago, last year, or for the most recent 52 weeks.

Price Dividend Will Support: This low price is appropriate for stocks that have high dividend yields. When you consider that today's interest rates are very low and the average stock in the S&P 500 index has a dividend in the 2% range, higher yields of 2.5% and more today might attract investors looking for income.

If you remember from the discussion of the Price-Earnings History section in Chapter 6, the yield is the dividends paid per share divided by the stock's price. As the stock price goes down, the yield increases. The idea is that buyers looking for yield watch the price of a stock, and when it comes down to the point at which yield is as high as it has been at past low periods, they buy the stock. Their buying reverses the stock's downward trend.

The SSG calculates the low price supported by the dividend by dividing the current annual dividend per share by the highest yield detailed in the Price-Earnings History portion. The SSG uses the highest yield because dividing by this number results in the lowest low price. For example, in this case dividing $1.76 by 1.5% equals $115.80. If the highest yield was 1%, the price supported by the dividend would be $176.

Again, most of the time, you'll multiply the projected average low P/E by the estimated low EPS to determine a low price. But sometimes this approach produces a low price higher than the current price. If the current stock price is already lower than your forecast low price, your forecast is already wrong and you must reduce your forecast low price even more.

For O'Hara Cruises, the projected low price using the typical method produces a forecast low of $116.40. It's a good idea to compare the projected low with the current price, with a rule of thumb to shoot for a forecast low at least 20% below the current price. Here the estimated low is 22% below the current price of $149.83.

Buy, Hold, and Sell Zones

Now that the estimated price range is established with the estimated high and low prices, the next step is to find where the current price falls within that range. By dividing the range between estimated high and low price into three zones — buy, hold, and sell — you can determine whether the stock might meet your objectives. If the price is near the low price you anticipate over the next five years, most of the potential price movement is up, offering more reward than risk. When the price is near the top of the range, however, the stock has to exceed your estimated high price to provide the return you expect — a risk you don't want to take.

The range is simply the forecast high price minus the forecast low price. So for O'Hara Cruises, $261.30 - $116.40 = $144.90. On the SSG, the lowest 25% of the range is the buy zone. The hold zone is the next 50% and the sell zone is the final 25%. When the current stock price is in the buy zone, the risk-reward potential is suitable.

The buy zone indicates the highest reasonable purchase price based on your judgments and the current stock price. You'll frequently see top companies in an industry out of the buy range. But be patient; you can establish a watch list to see whether the stock drops into your buy zone. Stock prices can drop because a company's performance is declining, which is a reason to stay away from the stock. But prices drop regularly because of short-term events unrelated to that company — conflict in other countries, competitors with regulatory problems, and uncertainty over the next interest rate move. These price drops could give you the chance you're waiting for to buy a great company at a great price.

The SSG takes 25% of the price range — $36.20 for O'Hara Cruises — and adds it to the potential low price. This creates a buy zone of $116.40 to $152.60. Any price above $152.60 will not provide a suitable return based on the risk.

The hold zone constitutes the next 50% of the forecast price range of $144.90. Adding $72.45 to $152.60 creates a hold zone of $152.60 to $225.10.The sell zone is the final 25% of the range, or $225.10 to the potential high price of $261.30.

We'll discuss the implications of the hold and sell zones in Chapter 11.

The Upside-Downside Ratio

The upside-downside ratio compares the potential price increase to the potential price drop. It doesn't indicate the probability of the price going up or down. But it does show the magnitude of these possible changes. BetterInvesting recommends an upside-downside ratio of at least 3 to 1. A lower ratio indicates that the stock is not currently in the buy range.

To determine the upside-downside ratio, you'll first subtract the current price from the forecast high price (actually, the online SSG applications make the calculations for you). For O'Hara Cruises, that's $261.30 - $149.83 = $111.46. Next, subtract the forecast low price from the current price: $149.83 - $116.40 = $33.43. Finally, divide $111.46 (the potential increase in the stock price) by $33.43 (the potential decrease in price). The result is 3.3 to 1. That's above BetterInvesting's recommendation of 3 to 1.

If the recommended upside-downside ratio is 3 to 1, you might think that an upside-downside ratio of 10 to 1 or even higher represents an incredible buy. But be careful. In these situations the cause might be that the current price is too close to the low price. As the current price approaches the estimated low price, the denominator of the ratio approaches zero, and the upside-downside ratio increases. If the current price closes in on the low price, it usually means that you didn't set the low price low enough.

By setting the low price close to the current price, you're essentially saying that no other bad news can affect this stock. The economy won't falter. No wars will break out. Nothing can make the company's EPS or sales worse. When you see a large upside-downside ratio, revisit the assumptions for the forecast low price. You should probably reduce your forecast low price even further. As we mentioned, shooting for a potential low price that's at least 20% below the current price is a nice cushion.

Negative upside-downside ratios are warning signs. They occur in two circumstances:

- The current price is *lower* than the estimated low price.
- The current price is *higher* than the estimated high price.

In both cases, your forecast prices are wrong, because the stock price has already surpassed the values you selected. If the current price is lower than the forecast low price for the next five years, drop your forecast lower. When the current price is higher than the forecast high price, there isn't much to do besides look for another stock to study. The stock's price is extravagantly overvalued.

Price Target

The last part of the Evaluating Risk and Reward Section shows the potential price appreciation of the stock over the next five years. The potential price appreciation is the forecast high price divided by the stock's current market price of the stock. For O'Hara Cruises, there's potential for 74.4% appreciation.

Note that this isn't the compound annual rate, which is used in the next section to determine the five-year potential. This calculation also doesn't include dividends. The SSG's final section, Five-Year Potential, will consider the potential from both the stock's price appreciation and from dividends.

Five-Year Potential

You've come to the finish line of the SSG. You've studied the company's quality; forecast its future sales and earnings growth; projected the average future high and low P/Es; determined the stock's potential high and low price; and evaluated the potential risk versus the potential reward.

But before you decide to purchase a stock, you have to find out whether its return will help you meet your portfolio objectives. The final section of the SSG, Five-Year Potential, details the potential return for a stock when purchased at its current price. Although the measures in the Evaluating Risk and Reward section hint at whether a stock offers good value, only the Five-Year Potential portion shows you the return you might achieve from both price appreciation and dividends.

Only time will tell whether a company lives up to your expectations. If you could forecast the future with total accuracy, investing would be effortless. In the real world, stock studies are no more than a series of educated guesses. A historical rule of thumb for BetterInvesting members using the method we're detailing in this book is that out of five investments, one will do better than expected, three will perform as expected, and one will fail.

Adding Dividends to Total Return

In the Evaluating Risk and Reward section, only the stock's potential price appreciation is considered. In the Five-Year Potential section, you'll see what dividends, if the company issues them, add to total return.

Figure 8.1: Measuring O'Hara Cruises' Return Potential

A. CURRENT YIELD

Indicated Annual Dividend / Closing Price = 1.76 / 149.83 = 0.0117 = 1.2%

B. AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout / Forecast High P/E = 28.9 / 27.90 = 1.0%

AVERAGE YIELD - USING FORECAST AVERAGE P/E

Avg. % Payout / Forecast Average P/E = 28.9 / 23.95 = 1.2%

C. COMPOUND ANNUAL RETURN - USING FORECAST HIGH P/E

Annual Appreciation	11.8%
Average Yield	1.0%
Annualized Rate of Return	12.8%

COMPOUND ANNUAL RETURN - USING FORECAST AVERAGE P/E

Annual Appreciation	8.4%
Average Yield	1.2%
Annualized Rate of Return	9.6%

SSG RESULTS SUMMARY

Zone:	BUY
Upside Downside Ratio	3.3 To 1
Total Return (High P/E):	12.8%
Projected Return (Avg. P/E):	9.6%
Buy price to satisfy US/DS of 3 to 1 and 15% total return:	135.9
Closing Price (02/01/16):	149.83

Dividends can seem like small potatoes when you see them come in a few pennies here or a few dollars there. But companies that pay dividends usually pay them each quarter, and those small amounts add up over the years. Some companies reinvest all their earnings into the company to produce more growth — and investors hope that growth leads to higher stock prices. When companies distribute earnings to shareholders as dividends, they contribute to the return you receive, regardless of whether you reinvest the dividends in more company stock or use them to pay the electric bill.

Figure 8.2: O'Hara Cruises P/E History

CLOSING PRICE (02/01/16): 149.83 HIGH THIS YEAR: 177.28 LOW THIS YEAR: 139.01

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	112.4	76.2	3.61	31.1	21.2	1.00	27.7%	1.3%
2012	109.2	80.9	4.12	26.5	19.6	1.16	28.1%	1.4%
2013	111.6	86.9	4.45	25.1	19.5	1.32	29.7%	1.5%
2014	129.3	101.1	4.92	26.3	20.5	1.48	30.1%	1.5%
2015	174.0	110.8	5.71	30.5	19.4	1.66	29.1%	1.5%
AVERAGE		91.2		27.9	20.0		28.9%	
CURRENT/TTM			5.82			1.76	30.3%	
AVERAGE PRICE EARNINGS RATIO: 24.0					CURRENT PRICE EARNINGS RATIO: 25.8			

Show/Hide Price/Earnings Chart View Peer Data

Total return equals the return from both price appreciation and dividends. Price appreciation is easy to understand. But how do you calculate the future return from dividends? Dividends are like interest paid on your initial investment, so it makes sense to present the return from dividends in the form of yield — just like the yield banks pay on a savings account.

Let's return to our example of O'Hara Cruises to learn about the company's potential return. ***(See Figure 8.1.)*** Many of the numbers come from the Price-Earnings History ***(see Figure 8.2)*** and Evaluating Risk and Return ***(see Figure 8.3)*** sections.

Current Yield: This number is derived from figures in the Price-Earnings History section. The current yield is the current dividend, as detailed at the bottom of Column F, divided by the closing price. This yield changes depending on the price paid for the stock. For O'Hara Cruises, the dividend ($1.76) is divided by the closing price ($149.83) and converted to a percentage: 1.2%.

Average Yield: The average yield over the next five years represents the annual return you can expect dividends to contribute to total return. The calculation for average yield employs the average percent payout calculated in the Price-Earnings History section — in this case, 28.9%.

Figure 8.3: O'Hara Cruises Risk Versus Reward

A. HIGH PRICE – NEXT 5 YEARS

Avg. High P/E: **27.9** x Estimate High Earnings / Share: **9.37** = Forecasted High Price: **261.3**

B. LOW PRICE – NEXT 5 YEARS

(a) Avg. Low P/E: **20.0** x Estimate Low Earnings / Share: **5.82** = Forecasted Low Price: **116.4**

(b) Avg. Low Price of Last 5 Years:

(c) Recent Market Low Price:

2014 Low Stock Price: **101.1** 52 Week Low Price: **139.0**

2015 Low Stock Price: **110.8**

(d) Price Divident Will Support: $\frac{\text{Indicated Dividend}}{\text{High Yield}} = \frac{1.76}{1.5\%} = \mathbf{115.8}$

Selected Forecasted Low Price: **116.4**

C. ZONING using 25%-50%-25% (click to toggle)

Forecast High Price: **261.3** Minus Forecast Low Price: **116.4** = **144.9** Range. 25% of Range: **36.2**

Buy Zone: **116.4** to **152.6**

Hold Zone: **152.6** to **225.1**

Sell Zone: **225.1** to **261.3**

Closing Stock Price of **149.83** is in the **BUY** Zone.

Show / Hide Gain vs Loss Chart

D. UPSIDE DOWNSIDE RATIO (POTENTIAL GAIN VS. RISK OR LOSS)

$\frac{\text{Forcasted High Price – Closing Price}}{\text{Closing Price – Forcasted High Price}} = \frac{(261.3 - 149.83)}{(149.83 - 116.4)} = \frac{111.46}{33.43} = \mathbf{3.3\ to\ 1}$

E. PRICE TARGET (Note: This shows the potential market price appreciation over the next five years in simple interest terms.)

$\frac{\text{Forcasted High Price}}{\text{Closing Price}} = \frac{261.3}{149.83} = \frac{(1.7439 \times 100)}{33.43} = (1.7439 - 100) = \mathbf{74.4\%\ Appreciation}$

(The SSG program allows you to change the payout ratio if there are annual payout numbers that should be

excluded. This can happen, for example, when a company makes a large one-time dividend payment that is not consistent with its annual policy. Also, when a company just starts a dividend policy, the numbers might be artificially low until a normal rate is established.

For example, Apple began issuing dividends in 2012. But the payout ratio was only 6% that year. In the following three years the payout ratio was above 20%. The SSG online applications allow you to delete the 2012 figure from consideration.

The SSG provides two options for calculating the average yield: You can use either the forecast average high P/E or the expected average P/E. The SSG performs the calculation for you either way.

If you are going to compute the total compound annual return using the forecast average high P/E, you use the average yield based on the high P/E. For O'Hara Cruises, the average yield with the high P/E is 1.0%.

If you're going to use the total compound annual return using the expected average P/E, you use the average yield based on the average P/E. The average P/E is the average of your forecast high and low P/Es for the next five years. For O'Hara Cruises, the average yield with the average P/E is 1.2%.

Calculating Compound Annual Return

You're probably asking which P/E to use in calculating total return. BetterInvesting members mainly use the average high P/E. If you've made reasonable judgments, employing the high P/E should result in a realistic total return expectation.

To really see whether a company provides the return you want, you have to determine the compound annual rate of return. The CAGR assumes a steady growth rate over whatever period you choose. In reality you'll see different returns every year.

Here we see that O'Hara Cruises has an expected CAGR of 12.8% — 11.8% a year from the stock's price appreciation and 1% annually from the dividend. The rate of return should meet or exceed the minimum return you would expect for the company's size. O'Hara is a medium-size company with revenue above $1 billion, so we should expect an annual rate of return of 7% to 12% or more. O'Hara Cruises passes this test with flying colors.

The SSG isn't meant to be a precise tool. Using the forecast average P/E, which of course would be lower than the forecast average high P/E, can provide a range for your expected return. For this calculation, your expected average P/E is multiplied by your estimated high EPS. This determines a different potential high price, which

in turn is used to compute the expected average annual return based on the expected average P/E. The SSG online applications perform all the calculations for you, displaying the final result. For O'Hara Cruises, the expected annual return using this method is 9.6%.

Compound annual return identifies whether a company meets your objective for return. But purchasing a stock is still more art than science. Before you decide to buy, it's a good idea to review all the sections of the SSG. We'll discuss the buying decision further in Chapter 9.

Figure 8.4: O'Hara Cruises SSG Front

NATIONAL ASSOCIATION OF INVESTORS CORPORATION
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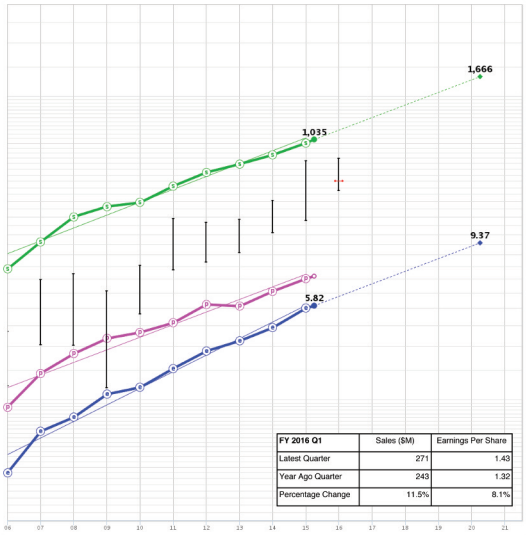
Empowering Investors Since 1951

Stock Selection Guide

Company	O'Hara Cruises			Date	02/01/16
Prepared by				Data taken from	BI Stock Data
Where traded	NYS	Industry	Leisure		
Capitalization --- Outstanding Amounts				Reference	
Preferred ($M)			0.0	% Insiders	% Institution
Common (M Shares)			42.1	16.9	97.3
Debt ($M)	300.0	% to Tot Cap	35.0	% Pot Dil	1.6

Symbol: NAIC

1 VISUAL ANALYSIS of Sales, Earnings, and Price



FY 2016 Q1	Sales ($M)	Earnings Per Share
Latest Quarter	271	1.43
Year Ago Quarter	243	1.32
Percentage Change	11.5%	8.1%

(1) Historical Sales Growth	10.3%	(3) Historical Earnings Per Share Growth	13.4%
(2) Estimated Future Sales Growth	10.0%	(4) Estimated Future Earnings Per Share Growth	10.0%

Figure 8.5: O'Hara Cruises SSG Back

2 EVALUATING Management — **O'Hara Cruises**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Last 5 Year Avg.
Pre-tax Profit on Sales	32.5%	34.2%	32.8%	34.1%	34.7%	32.9%	34.1%	31.6%	33.0%	33.2%	33.0%
% Earned on Equity	22.3%	26.6%	26.3%	27.7%	28.7%	31.6%	33.1%	32.0%	39.9%	44.3%	36.2%
% Debt To Capital	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	1.2%

3 PRICE-EARNINGS HISTORY as an indicator of the future

This shows how stock prices have fluctuated with earnings and dividends. It is building block for translating earnings into future stock prices.

CLOSING PRICE 149.83 (02/01/16) **HIGH THIS YEAR** 177.28 **LOW THIS YEAR** 139.01

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2011	112.4	76.2	3.61	31.1	21.1	1.00	27.7	1.3
2012	109.2	80.9	4.12	26.5	19.6	1.16	28.1	1.4
2013	111.6	86.9	4.45	25.1	19.5	1.32	29.7	1.5
2014	129.3	101.1	4.92	26.3	20.5	1.48	30.1	1.5
2015	174.0	110.8	5.71	30.5	19.4	1.66	29.1	1.5
AVERAGE		91.2		27.9	20.0		28.9	
CURRENT/TTM			5.82			1.76	30.3	
AVERAGE PRICE EARNINGS RATIO 24.0					CURRENT PRICE EARNINGS RATIO 25.8			

4 EVALUATING RISK and REWARD over the next 5 years

Assuming one recession and one business boom every 5 years, calculations are made of how high and how low the stock might sell. The upside-downside ratio is the key to evaluating risk and reward.

A HIGH PRICE - NEXT 5 YEARS

Avg. High P/E 27.9 X Estimate High Earnings/Share 9.37 = Forecasted High Price $ 261.3

B LOW PRICE - NEXT 5 YEARS

(a) Avg. Low P/E 20.0 X Estimate Low Earnings/Share 5.82 = Forecasted Low Price $ 116.4

(b) Avg. Low Price of Last 5 Years 91.2

(c) Recent Market Low Price 101.1

(d) Price Dividend Will Support Indicated Dividend / High Yield = 1.66 / 1.52% = 109.3

Selected Forecasted Low Price $ 116.4

C ZONING using 25%-50%-25%

Forecasted High Price 261.3 Minus Forecasted Low Price 116.4 = 144.9 Range. 25% of Range 36.2

Buy Zone	116.4	to	152.6
Hold Zone	152.6	to	225.1
Sell Zone	225.1	to	261.3

Present Market Price of 149.83 is in the **BUY** Zone

D UPSIDE DOWNSIDE RATIO (POTENTIAL GAIN VS. RISK OR LOSS)

High Price 261.3 Minus Present Price 149.83 = 111.46 / 33.43 = 3.3 To 1

Present Price 149.83 Minus Low Price 116.4

E PRICE TARGET (Note: This shows the potential market price appreciation over the next five years in simple interest terms.)

High Price 261.3 / Closing Price 149.83 = 1.7439 X 100 = 174.39 - 100 = 74.4 % Appreciation

5 5-YEAR POTENTIAL

This combines price appreciation with dividend yield to get an estimate of total return. It provides a standard for comparing income and growth stocks.

A Indicated Annual Dividend 1.66 / Closing Price 149.83 = 0.0117 = 1.2 % Current Yield

B AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout 28.9 % / Forecast High PE 27.90 = 1.0 %

AVERAGE YIELD - USING FORECAST AVERAGE P/E

Avg. % Payout 28.9 % / Forecast Average PE 23.95 = 1.2 %

C COMPOUND ANNUAL RETURN - USING FORECAST HIGH P/E

Annualized Appreciation	11.8 %
Average Yield	1.0 %
Annualized Rate of Return	12.8 %

COMPOUND ANNUAL RETURN - USING FORECAST AVG P/E

Annualized Appreciation	8.4 %
Average Yield	1.2 %
Annualized Rate of Return	9.6 %

Figures 8.4 and 8.5 show you the completed SSG for O'Hara Cruises.

To Buy or Not to Buy?

A decision whether to purchase a stock is just business. A stock doesn't care whether you like it, pay too much for it, hold on to it too long, or sell it too soon. But buying a stock should be a long-term commitment, so you want to ensure that the two of you are compatible.

When you're just starting out, the SSG can take some time to complete. It's a good idea to summarize your findings when you're done. You can use this summary to make a decision, make a recommendation to your investment club, or review your holdings.

Whether you study stocks by yourself or collaborate with investment club members, organization and consistency produce stock studies that you can rely on. You need some kind of checklist to make sure you cover all the bases. As you gain experience, you can create your own list of items to check for every stock you study.

As a beginner, you can use a pretty short list:

Historical sales and EPS growth

- Increasing sales and EPS.
- Sales and EPS growing at a steady, consistent rate.
- Sales and EPS growing at about the same rate.
- Sufficient growth for the size of the company. Small companies with annual revenues of $1 billion and less, more than 12% annually; medium-size companies with revenues of $1 billion to $10 billion, between 7% and 12% or more; large companies with revenues above $10 billion, between 5% and 7% or more.
- Has growth been slowing over recent years? This is natural for companies as they get larger, but make sure growth isn't slowing too much.
- Is recent quarterly growth in line with historical growth? Check into large changes.

Percent pre-tax profit on sales (profit margin)

- Historical profit margins steady or increasing.
- Profit margins as good as or better than peers' profit margins.

Percent returned on equity (return on equity, or ROE)

- Historical ROE even or slightly increasing. Check out significant changes up or down.

- Look for companies with at least 15% ROE. Great companies often achieve ROE of 20%.
- Look for debt levels to be less than 33% of capitalization. Compare to others in the industry and to industry averages.

Sales and EPS growth projections

- What does the company do to make money?
- What's driving or challenging future growth?
- What are the most recent trends in growth? These are generally considered the most relevant. Growth will generally slow as the company becomes larger.
- What are the analyst estimates? Use these estimates as additional information and make your own judgment.
  Are your estimates reasonable and achievable? It's very difficult to maintain sales and earnings growth above 15% for the long term. Also exercise caution in projecting EPS to grow faster than sales.

Future P/E projections

- Are there any P/Es that don't seem to fit because they're much higher or lower compared with the other values? Remove them if so.
- Did you estimate future P/Es higher than the historical averages? Use extreme caution if you did.
- Is your future high P/E reasonable? In general, estimated high P/Es shouldn't exceed 30.

Low price projection

- Is your forecast low price at least 20% below the current price?
- Is your upside-downside ratio extremely high, say, above 9 to 1?
  If so, your forecast low price is probably too close to the current price.

Buy criteria

- Is the stock's price currently in the buy zone with the upside-downside ratio above 3 to 1? That's the only time it's appropriate to buy the stock.
- Will the projected total compound annualized return be sufficient for your portfolio?
  A portfolio that grows at 15% compounded annually would double your money in five years.

If you're using the CoreSSG, you can walk through your SSG and answer the questions each portion of the Guide asks. Also, consider using the template BetterInvesting members use when contributing First Cuts. To find the First Cuts template, go to Tools & Resources at the BetterInvesting website and select Worksheets.

Visual Analysis

A quick glance at the SSG's Visual Analysis section tells you whether the company has grown strongly and consistently over the past 10 years. Remember to look for railroad tracks — almost parallel lines of sales and EPS growth — at an upward angle that indicates the growth at a rate you expect from a company of its size. In addition, make sure you can explain any values that don't fit the pattern or are significantly below or above the industry average. And don't forget to document whether you would consider purchasing this stock based on the SSG's Visual Analysis. Here's a synopsis of questions to ask yourself based on the Visual Analysis:

- Have sales trended up, down, or sideways? Look for steadily increasing sales.
- Has EPS trended up, down, or sideways? Look for steadily increasing EPS and EPS growth that's parallel to sales growth.
- Has price trended up, down, or sideways? A stock price trending up with sales and EPS shows investor confidence in the stock. But sometimes price seems to stand still as EPS increases. If EPS is increasing and the price isn't moving, the P/E is decreasing. This could mean the P/E was too high to begin with and is returning to more reasonable levels.
- How has the company been increasing sales? Sales growth from new products, new uses for existing products, and increasing same-store sales (produced by management) are desirable because such growth can continue for long periods. This is called organic growth and is generally consider high-quality growth. Another way to grow is by acquiring other companies. Though companies can be successful growing by acquisition, sometimes they stumble in integrating a new company into their operations or they pay too high a price for a company. Analyze growth more carefully for companies that tend to grow by acquisition to ensure they have a good track record in doing so.
- Is the company growing fast enough for a company of its size? Make sure that sales and EPS grow at least 5% to 7% or more for large companies, 7% to 12% or more for midsized companies and more than 12% for small companies.
- Would you consider this stock based on the visual analysis? Document whether you would investigate or discard this company as a candidate for purchase based on the results from your visual analysis.

Evaluating Management

Good management can overcome many obstacles, whereas poor management can ruin companies with the best of prospects. Your first check for the abilities of management is in the SSG's Visual Analysis. Managerial competence is also indicated by consistent or increasing profit margins and ROE in the Evaluating Management section. Also check the company's debt levels to ensure they're manageable. As with sales and EPS in the Visual

Analysis, make sure you can explain any values that aren't representative of the company or those that are significantly below or above the industry average.

Questions from this section include:

- Is management successfully growing the company?
- Is management improving profit margins steadily or keeping margins stable?
- Is management increasing the return on equity steadily or maintaining a stable ROE?
- Does management that produced a company's growth and quality still run the show? Are key managers still there but ready to retire?
- Is debt at a manageable level?

Is the Price Right?

A company might be a powerhouse of consistency and growth, but you still won't make money if you pay too much for its stock. Review P/E ratios and past prices in the Price-Earnings History section and forecast high and low prices for the next five years in the Evaluating Risk and Reward section to see whether the stock price can increase enough to meet your objectives. Explain any P/E or price values that aren't representative. Assess the upside-downside ratio to see whether the odds of the price increasing are in your favor.

The following are questions to ask regarding the stock's investment potential:

- Are P/E ratios trending up or down, and do you expect the trend to continue? Recent figures are more relevant, but in general, don't estimate future high and low P/Es that are higher than the averages.
- What's the reasoning behind the choices for the forecast high and low P/Es?
- Are your P/E judgments in line with the current market? The average P/E for S&P 500 index companies historically is about 16, but the current average P/E can differ significantly from that number.
- Are the company's P/E ratios above or below average in the industry? P/E ratios above the industry average often indicate an industry leader — a company in which investors have confidence.
- Are you comfortable with the high and low P/Es you selected? Be careful about selecting P/Es above 30 or so — history has not been kind to stocks with very high P/Es.
- How did you estimate the future average low price? The most common method for a growth company is to multiply the estimated average low P/E by the estimated low EPS. If this is the method you employed, how did you select the low EPS?
- Where is the current price within the buy, hold, and sell ranges?

- Does the upside-downside ratio indicate enough of a potential price increase to offset any price drop? Look for an upside-downside ratio of at least 3:1.
- What compound annual return might I receive if I purchase this stock at the current price? Make sure the potential total return matches your investment goals and is appropriate for the company's size.

Beyond the SSG

Many people mistake SSG calculations for a complete stock study. It's important to understand a company's prospects are often difficult to quantify. Before you act on some nice looking numbers in an SSG, review the qualitative features of a company and keep looking for signs of strength and quality. The following are some of the questions to ask:

- Has the company been in business for at least five years? A company needs to have at least five years of financial history available for you to be able to review management's capability and forecast growth.
- Does it operate regionally, nationally, or internationally? The broader a company's region of operation, the more stable its performance might be.
- How broad are its service or product offerings? A company with limited services or products could get in trouble if its product becomes obsolete or a large company decides to compete.
- How well known is the company and its products? Well-known company names or brands might overcome competition promising lower prices or higher quality.
- Does the company pay dividends, and if so, how good is its dividend record? Dividends can provide a significant portion of your return. If they do, you want a long and consistent record of dividends.
- How does the company grow its business? Look for growth strategies that can continue indefinitely — new products, new uses for existing products, and increasing same-store sales.
- Is competition increasing? Competition can lead to lower profit margins or decreasing market share. If competition is increasing, only invest in the industry leaders that can prevail over upstart competitors. Companies that have sustainable competitive advantages, such as selling products and services that are difficult for customers to switch from, can keep competition at bay better than companies that sell products and services that are easy to replicate.
- Are there economic, demographic, or technological issues that might influence the future? Some industries move with the economy, so you should avoid purchasing cyclical companies such as carmakers when the economy is heading for a downturn. Other industries benefit from demographic changes. For instance, health care companies benefit from an aging

population that requires more health care. Just as P/E ratios can buoy prices or send them running, industry prospects can boost or bottom out the companies within an industry. Check for trends to see whether a company has to fight the industry current to succeed or can surf to success on a wave of prosperity.

- Are there issues that affect the entire industry?
- Will the industry benefit or be hurt by population, technology, or regulatory changes?
- What are the typical fundamental measures for the industry? (Some industries enjoy high profit margins and others low margins.)

Other Considerations

Some BetterInvesting members also study additional metrics, including the relative value and PEG ratio. You might find these figures instructive and interesting to consider, though not necessary.

Relative value compares the current P/E to the average P/E ratio (adjusted by your judgment) for the last five years — it measures how much investors are currently paying for a stock compared with the average P/E during the past five years. An RV above 1 means the current P/E is above the five-year average, while an RV below 1 means the current P/E is below the five-year average. For example, if a company's current P/E is 20 and the five-year average P/E is 22, the relative value would be 0.91.

When you buy a stock with a relative value over 1.10, you're paying a P/E higher than the five-year average. You run the risk of P/E ratios falling back to the company's more normal P/E. When P/Es drop and the earnings stay the same, the stock price drops. Even if EPS increases, falling P/Es reduce the return you would otherwise enjoy.

On the other hand, a relative value below 0.85 could indicate hidden problems that other investors know about and you don't. You should try to find out why investors won't pay more for the company before you purchase. Sometimes you'll agree that you should stay away from the stock, and other times you'll determine that the stock's a true bargain.

The PEG ratio compares a stock's P/E with earnings growth in a study of the stock's value; you simply divide the P/E by the growth rate. This measure, a common site on analyst reports, can be computed several ways. One common way is to use the current P/E and the forecast EPS growth rate. For a stock selling at a P/E of 20 and with 10% projected EPS growth, for example, the PEG would be 2.0. Some people have guidelines for maximum PEG ratios.

Some other considerations:

The data source can affect your view of a company. Data sources have differing policies regarding the numbers they provide. Some services "normalize" the data by having analysts refine earnings and other figures to account for special circumstances. Other services provide "as-reported" numbers, meaning these are identical to what the company reports in its financial statements using standardized procedures known as generally accepted accounting principles, or GAAP. Still other services use non-GAAP numbers provided by the company. (BetterInvesting's online stock analysis applications employ GAAP data.)

Each of the three approaches has strengths and weaknesses. The important idea here is to use the same data source for an individual study or when comparing companies so that you take an apples-to-apples approach.

Preferred shares usually entitle shareholders to specific dividend rates. Owners of preferred shares also have "first rights" to distribution of assets if the company closes its doors. If a company offers preferred shares, the common shares could become worthless if the company goes out of business. (If you're using the SSG, you'll likely be steering clear of such troubled companies.)

Multiple classes of stock typically come with more voting rights for one class relative to the other, even though they have the same rights to profits. Key insiders such as company founders and officers receive the shares with more voting rights to maintain more control over company affairs. This might mean management's interests aren't completely aligned with those of shareholders. For example, they might vote down shareholder resolutions that aren't in their favor.

A significant percentage of **insider ownership** is usually a good thing, but when key insiders own more than half the common shares outstanding, they'll control shareholder voting.

The Stock Comparison Guide

We've discussed the importance of comparing company fundamentals against those of competitors. An additional tool from BetterInvesting supplements your SSGs and allows you to look at studies side by side. Comparing companies in the same industry can point you toward buying the highest-quality stocks within an industry selling at the most reasonable prices.

The Stock Comparison Guide (SCG) allows you to compare the attributes of up to five companies based on SSGs you've already completed and see how they fare against one another as well as against industry averages. The tool works best when you're studying companies in the same industry. For example, you can't compare

profit margins or debt ratios between industries because typical values can vary widely — 26% profit margins for drug companies versus 4% for grocery stores.

See Figure 9.1 for an example of the SCG. The two companies in the comparison, Infosys and Cognizant Technology Solutions, are both in the information technology services industry. You can compare each data point in the SSG and select winners and losers for each category (in green shading).

When you're finished you might have a clearer picture of which stock provides the best investment opportunity. (Stocks are mentioned here only for educational purposes. No investment recommendations are intended.) Make sure you've updated the data for each SSG you're comparing so that you're comparing recent numbers.

Figure 9.1: Stock Comparison Guide for INFY and CTSH

BETTERINVESTING SCG CORE

Print Notes Tools Close

Comparison	Infosys INFY 2/9/16 Large Information Technol.. Count: 3	Cognizant Technology CTSH 2/9/16 Large Information Technol.. Count: 7	Pick study or type ticker:			Industry averages Information Technology Services
Growth Comparisons						
Hist. Sales Growth Rate - 10 YR (%)	15.5%	30.3%				4.1%
Hist. Sales Growth Rate - 5 YR (%)	9.4%	21.8%				4.0%
Estimated Sales Growth Rate (%)	12.0%	15.0%				
Hist. Earnings/Share Growth Rate - 10 YR (%)	12.5%	26.2%				8.5%
Hist. Earnings/Share Growth Rate - 5 YR (%)	6.3%	18.7%				6.1%
Estimated Earnings Per Share Growth Rate (%)	12.0%	15.0%				
Management Comparisons						
% Pretax Profit on Sales (Last 5 Year Average)	32.2%	19.0%				12.0%
% Earned to Equity (Last 5 Year Average)	25.7%	20.9%				38.3%
% Debt to Capital	0.0%	3.5%				36.2%
Present Price	16.55	54.05				
Present Price/Estimated Total EPS	2.6	2.7				
Average P/E	19.0	20.4				20.0
Current P/E	18.8	21.2				24.1
Present Price Indicator	Buy	Buy				
Upside/Downside Ratio	5.78 to 1	6.32 to 1				
Present Yield	1.78%	0.00%				2.2%
Avg. Percent Payout	24.95%	0.00%				22.0%
Compound Annual Return - Forecast High P/E	17.84%	17.56%				
Sector	Technology	Technology				
Industry	Information Technology Services	Information Technology Services				
Total Sales Last FY	8,711.0 (Large)	10,262.7 (Large)				
Price Date	Feb 08, 2016	Feb 08, 2016				
Last Reported Quarter	Dec 31, 2015	Sep 30, 2015				
Judgment Date	Feb 09, 2016	Feb 09, 2016				
ADR	Y	N				

Summing Up

It's always exciting to find a stock in the buy range. Before you purchase it, however, you should check to see whether you're buying the best possible investment you can. Go over your SSG again and answer questions we've raised in this chapter to solidify your opinion. Finally, you might want to compare the stock study results from several candidates from the same industry. Perhaps another company in the same industry offers a higher-quality, better return, or less risk.

Buying a Stock

After you've decided to acquire a stock using the Stock Selection Guide, the best way to continue your education is to invest in that stock and begin following its progress. You can choose from a plethora of brokers, accounts, and types of orders. Don't let the selection intimidate you. After you pick a stock to buy, finding a way to buy it is a snap.

When you conduct your research, make sure you're reading the latest information. The brokerage industry changes at a fast pace. An article at a financial news site about brokerage fees, for example, can become outdated rather quickly. If you're interested in learning more about a specific brokerage, get all the information you'll need from the brokerage itself.

Types of Brokerages

Brokerages were once "one size fits all." Today they come in all shapes and sizes. With full-service brokers, you pay hefty commissions and receive deluxe treatment — you don't just get someone to buy and sell stock for you.

Brokerages generally can be broken down into two types:

- Full-service brokers offer financial planning, in-house research, stock recommendations, and a broker who, in theory, only recommends investments that fit your objectives. These often are the most expensive option, charging higher commissions than discount brokers.
- Discount brokers that mainly offer the ability for investors to conduct trades online by themselves rather than calling a broker. The commissions at these firms typically are far lower, ranging from $10 per transaction on down.

The lines have blurred between full-service and discount brokers, with full-service brokerages offering investors more self-service options and discount brokerages providing person-to-person assistance along with the research traditionally found only at full-service firms.

The kind of brokerage you want depends on what your needs are. Some of the factors are:

Account minimums: Brokers might require a minimum amount of money in your account. The minimums vary widely, and some brokerages offer different services and commissions based on your account minimum.

If you're just getting started, you can opt for a firm with no minimum balance requirements. But even brokerage houses with account minimums might waive the minimum if you agree to an automatic monthly investment plan. Automatic investment plans have a secondary benefit in that they keep money flowing into your investments. You won't be tempted to skip a deposit into your investment account.

Commissions: Brokers charge a wide range of commissions per trade. In addition, brokers might charge different amounts for online orders, telephone orders, and other types of orders. Commissions can vary based on how many shares you trade and other factors. After you decide how you want to place your orders, look for the broker who offers a reasonable fee for those services. If you decide to open an account with a discount brokerage, check into options for person-to-person assistance in case you have any issues.

Other fees: Fees for services other than stock trades could add up to more than you save on low-cost commissions. Don't automatically choose the broker with the lowest commissions.

Among the additional services, some brokers provide additional investment information, including research reports (see Chapter 5 for more information on analyst reports). They might offer accounts with check writing, automatic rollover of cash to a money market account, and automatic fund transfers.

Some brokers offer only limited services outside of conducting trades. Verify that a broker offers the access you want and see whether trades cost more if you use the telephone or show up in person instead of trading online.

If price is important, figure out how much your account will cost you each month, including fees and commissions, by asking for a complete list of services and the associated fees. Understand whether there are maintenance fees for your account. As a long-term investor who isn't making trades every day, you'll want to know whether there are any inactivity fees.

Dollar-cost averaging means investing a fixed amount of money in stocks at a regular interval. You buy fewer shares when the price is high and more shares when the price is low, reducing your average price paid over time. These regular contributions to your investment accounts are great for building wealth, even if you love to spend money.

Payroll deductions and automatic transfers to an investment account protect your hard-earned money from your spending self. You get the benefits of dollar-cost averaging and you might think twice before taking money out of savings.

You can buy stocks directly from many companies through their dividend reinvestment plans, or DRIPs. To enroll in a DRIP, you usually need only one share of stock in the company. After that, many companies reinvest your dividends in your name without charging any fees or commissions. Others have a fee that is usually less than any broker's fee.

In addition to reinvesting dividends in DRIPs, you can often buy additional shares of stock with a small investment and little or no commission. At this point you refer to them as Optional Cash Purchases (OCP) or direct stock purchase (DSP). These additional purchases occur on a regular schedule, such as the last day of the month or the quarter. You can send in a check just before the purchase date; the company purchases your shares, and you then receive regular account statements documenting what you own and your transactions.

Many brokerages also offer dividend reinvesting, often for free.

Accounts and Taxes

Everyone knows that taxes can take a big chunk out of the money you make, whether it's your salary or your investment returns. When you hold investments in a taxable account, you'll pay taxes when you sell stocks at a profit, with the rate depending on how long you held the investment. The capital gains tax is lower for long-term investments, however, and it's lower than the tax rates on ordinary income.

Even so, why give up any money to taxes unnecessarily? Most, but not all, tax-advantaged accounts revolve around retirement. These accounts are aptly titled. They have an advantage because you pay less in taxes on the money you make in them.

Of course, nothing to do with taxes comes without strings attached. There are all sorts of rules regarding retirement account investing, such as limits on contributions and withdrawals and the associated tax implications, and they change on a dime. New retirement account options are introduced from time to time as well.

Individual Retirement Accounts (IRAs), the broadest category of retirement accounts, come in several forms. With a traditional IRA, your contributions might be tax-deductible. More importantly, your earnings in the account aren't taxed until you withdraw funds from the account so that you can let the compounding work to grow your nest egg.

Placing Your Order

When you want to place an order with a brokerage, understand how the brokerage fulfills the order. You'll have a range of options, but as a beginner you'll want to keep it simple and ignore many of them.

Focus on placing market orders, which buy or sell a stock immediately at the price of the stock the moment your order reaches the market. When you use a market order, you know that the trade will occur, but you won't know the price until after the trade executes. For example, say you place a market order to buy Freeblesnaps, Inc., at 10 a.m. on Tuesday, when its stock price is $33.25. Your order will most likely execute five minutes later, but the price may be a little lower or higher than the $33.25 it was when you placed the order.

At a low-cost brokerage, the firm might actually consolidate the orders and make a group trade at specific times of the day. You might have an option to complete the transaction as a market order, but you'll pay more for it.

As soon as you complete your first purchase, you own a portfolio — albeit a rather limited one. Soon you'll need to manage that portfolio to keep it growing robustly.

CHAPTER ELEVEN

Managing Your Portfolio

Some investors spend inordinate amounts of time fretting over buying new stocks. If they assume that buy and hold means buy and forget, they could be in for trouble if companies in their portfolio take a turn for the worse. Smart investors manage their portfolio to make sure that every dollar invested pulls its weight.

Portfolio management covers a lot of ground. It can increase your returns, increase your portfolio quality, reduce financial risks, and align your stock holdings with your investment goals.

When you're starting out and building your portfolio, you'll want to keep management of your stocks simple.

How Many?

One of the most common questions investors have is how many stocks they should hold. You'll certainly want to own more than a few to diversify your portfolio and reduce the risk from a stock going south, but you don't want dozens of stocks, either.

The overriding rule is to limit the holdings to a number you can reasonably follow. As a general range, shoot for around 10 to maybe 20 companies of different sizes and industries to reduce the risk in your portfolio. That should be enough for you to enjoy the lion's share of benefits from diversification.

Don't be in a rush to add stocks. Maintain your discipline in building a portfolio of carefully chosen, quality growth companies.

In following your portfolio, keep your financial goals in mind. These goals will guide your decisions in buying, holding, and selling stocks. With defined criteria, you can compare stocks you own and the results they offer to the standards you set.

Even more important, there's no need for second-guessing. It's easy to understand the reasons behind your actions. For example, as long as a company meets your criteria for growth and consistency, it's easy to hold tight when the real problem is a down market or an industry that is out of favor. When those short-term influences disappear, your solid stock should bounce right back.

How Often?

Be careful how often you watch your stocks. Since you're buying stocks with the idea of holding them for the

long term, you can do your portfolio harm by tracking the daily progress of your stocks. The noise of Wall Street can be compelling, especially during market downturns when everyone is yelling "Sell!" If you pay too much attention to market analysts, you might end up selling quality stocks that are only in temporary decline.

Your goal is to buy and hold, but that doesn't mean buy and forget. Adequate portfolio management entails a quarterly review of each stock to confirm that it still has the potential to meet your investing goals. Run an SSG on each stock once a quarter with updated financial data.

After completing an SSG on a stock, if the stock is in the buy zone and it still meets your quality test, you can consider buying more shares of it. If it's in the hold zone, the stock's potential appreciation based on the current price doesn't warrant additional investment. We'll discuss stocks in the sell zone a little later in this chapter.

Just about every game plan has an offense and a defense, and investing is no different. In portfolio management, defense is your first step. You want to get rid of stocks whose financial performance starts to deteriorate or that simply don't live up to your expectations. Declining financial measures, such as slowing growth and EPS or declining profit margins, eventually affect stock price. If you're paying attention to these signs, you can sell before the stock price dramatically reduces the value of your portfolio.

Then you can start on offense — finding stocks to achieve faster growth, higher quality, less risk, or better diversification. Depending on your objectives, you might strive to replace slower growers with more vigorous stocks. Or you might exchange one stock for another of better quality. For example, you could sell a stock growing erratically at 12 percent for one that produces consistent 12 percent growth. If some of your stocks have skyrocketed while the prices for others took a nap, you could sell overvalued stocks to buy more of those that represent a good value. Or, you might just decide to buy more of a solid stock that has dropped to an attractive purchase price. Of course, every situation is unique. You must decide what to do based on the stocks you own and current events.

When to Sell?

Investors often struggle with selling. Your possessions become familiar; you grow close. Selling seems like such a mercenary thing to do. But the stocks in your portfolio aren't your kids. You bought your stocks to make money, and eventually you will have to sell a few of them to collect — or protect — your earnings.

If selling seems more difficult than buying, that's because it is. You're faced with two good decisions: selling a stock for the right reasons and replacing the stock you sold with greater potential.

But selling is inevitable. The trick to selling is to be cool and logical. Some people have written sell policies to keep them on the straight and narrow. A list of reasons to sell a stock should include:

The company's fundamentals are deteriorating: Even companies that were once the zenith of strength can begin to deteriorate financially. When this happens, you can shield your portfolio from serious damage by selling the company before the stock price drops too far. Basic deteriorating financials are:

- Sales or EPS growth slowing below the level you expect.
- Declining profit margins.
- Excessive or increasing debt.

The company announces bad news. Be careful not to overreact to negative news reports, but you'll want to check out any bad news. High-quality companies with great management can overcome temporary issues. Basic red flags include:

- A potentially adverse management change, such as the chief financial officer leaving suddenly, a group of executives leaving at the same time, and so on.
- Indications of fraud or accounting problems.
- The loss of major customers.

The stock is overvalued. When you complete an SSG for a stock and see the price in the sell zone, you might be tempted to sell right away. It's true that when the stock is in the sell zone, the current price does not offer adequate potential return compared with the risk. But if you own a great company, be slow to sell because companies with great management typically continue to grow and the stock price will eventually catch up. Price follows earnings, but the stock price doesn't always follow earnings in lockstep. Stock price movements can be erratic. But the price will eventually catch up to the earnings of a good-quality company.

You need more diversification. When a stock's price increases so much it begins to dominate your portfolio, it's a good problem to have. Consider selling a portion of your holding and invest in a new stock or current holdings so that it brings the weighting of each stock more in balance.

You have a better option. Keep searching for stocks of equal or better quality with higher reward and less risk than those you currently own. If you find better replacements, you might sell existing stocks to improve the quality of your portfolio.

You can find new ideas all around you. Take note of new products, restaurant chains you enjoy, and so on. Read financial publications and make a list of companies you'd like to learn more about. The important idea is to

keep your eyes open for new opportunities and complete SSGs for any companies of interest.

You can also use stock screens to find new candidates. BetterInvesting's online applications include a screening tool that provides the basic criteria for identifying potential stock-study candidates. ***(See Figure 11.1.)*** Just because a stock is on the list, however, doesn't mean it's appropriate for your portfolio. Complete a thorough stock study of any company of interest using the SSG.

Figure 11.1: The Online Tools' Stock Screener

9 Yr Sales Growth (%):	>10%
9 Yr Earnings Growth (%):	>10%
Size:	Small / Medium / Large
Sector:	Technology
Dividend Yield (%):	Any
Pre-Tax Profit Trend:	Up / Even / Down
Return on Equity Trent	Up / Even / Down
PE / Historical EPS Growth:	Any
Traded Exchange:	US Exchanges Only
	Search

You need the money.

Rules for Not Selling

Investors run into trouble and lose high-quality companies when they sell too soon. Basic rules to follow include:

- Don't sell because the price hasn't moved. Long-term investors need to practice patience. Don't concentrate on the stock's price; focus on the fundamentals. Earnings growth drives the stock's price, but sometimes it takes a while for the market to recognize a company's performance.
- Don't sell because of a paper loss. The stock market gyrates up and down, and even the best companies can see their stock price fall when investors are in a negative mood about stocks.
- Don't sell on temporary bad news. High-quality management can overcome temporary obstacles.

CHAPTER TWELVE

Continuing Your Education

Now that you've begun studying stocks, completing SSGs, and investing in stocks, your education is just starting. Investment education is a lifelong pursuit. Increasing your understanding of a company's financial reports is a good place to start.

The income statement and balance sheet offer two views of company performance. The income statement shows how a company makes money, where it spends money, and how much is left over during given period. The balance sheet is a snapshot of what a company owns and owes and of the shareholders' investment in the company on a specific date. The balance sheet shows whether a company uses debt, stock, or both, to fund growth.

Just because accounting deals with numbers, some people reason that it must follow immutable mathematical rules. Our financial calculations don't use a specialized form of addition, subtraction, multiplication, or division. Because of the financial creativity some companies have exercised over the years, standardization in accounting allows investors to compare the financial health of two or more companies with some level of confidence.

Financial statements presented to the public must conform to generally accepted accounting principles, or GAAP. Still, company financial managers need to use their expertise in interpreting issues regarding money, goods, and expenses. For example, accounting principles require that financial reports record revenues and related expenses in the same period. This can result in expenses appearing in the income statement before the bills are actually paid. It might seem like a strange thing to do, but it more accurately reflects what the company truly earned during a period. For example, if a company has to buy components in bulk for its products but sells the products over a few years, costs at the beginning would outstrip sales, whereas costs would seem inordinately low for the rest of the time.

Viewing Income & Expenses Over Time

The income statement, also known as the profit and loss statement, shows the results of company operations over a period. Whether for a quarter or an entire year, the income statement shows revenues generated and expenses incurred during the period — in effect, how a company makes and spends its money over time. By dividing the earnings by the number of shares outstanding, the income statement also shows the earnings per share.

Some companies might include additional lines to further delineate revenues and costs, but the following table shows the basic ingredients of an income statement. The first column in **Figure 12.1** includes letter labels,

referenced by the calculations. The line items and their definitions are:

Figure 12.1: Income Statement (year ended Dec. 31, 2015)

	Sales or revenue	$32,259
	Cost and expenses	-$21,930
	Income before tax	$10,329
	Taxes	-$2,561
	Other deductions or additions	$20
a	Net income	$7,788
b	Dividends	$0
	Per-share numbers	
c	Shares outstanding (diluted)	6361
d	Earnings per share = (a/c)	$1.22
e	Dividends per share = (b/c)	$0.00
f	Price per share	$34.58
	Yield = (e/f)	0.0%
	PE ratio = (f/d)	28.34

Sales or revenue: The money coming in from products and services sold, interest earned, or income from selling assets.

Costs and expenses: The costs of running the company, including producing and distributing what a company sells. These costs could include the components of a product, salaries for employees, benefits, travel expenses, research and development, or marketing.

Income before tax (pre-tax profit): Sales minus costs and expenses.

Taxes

Other deductions or additions: You might see other types of deductions or additions in the income statement. For example, the sample statement here shows some income from discontinued operations. This is income produced by parts of the business that the company no longer operates.

Net income: The amount left over after costs and taxes are subtracted. A company can distribute net income to owners as dividends or reinvest to grow the business. The more income given to owners (stockholders) in a dividend, the less is available to reinvest and grow the company.

Dividends: The portion of earnings the company pays out to its shareholders.

Shares outstanding: The number of shares issued to all shareholders. Diluted shares include those that could be issued in the future, such as for employee stock options.

EPS: Net income divided by the number of shares outstanding. EPS shows how much of the company's earnings are attributable to each share of stock.

Dividends per share: The money the company pays out to each share.

The Balance Sheet: Snapshot of Finances

The balance sheet is a snapshot of what the company owns (assets), what it owes (liabilities) and the shareholders' investment in the company (shareholders' equity, or net worth) at a point in time. It is called a balance sheet because the shareholders' equity and total liabilities always balances with the total assets.

Some companies might include additional lines for finer detail about assets and liabilities, but the following table shows the basic ingredients of a balance sheet. The first column in **Figure 12.2** includes letter labels, referenced by the calculations.

Figure 12.2: Balance Sheet (2015)

	Current assets	$18,450
	Long-term investments	$5,729
	Property, plant and equipment	$10,415
	Goodwill	$1,722
	Other	$2,837
a	**Total assets**	**$39,153**
	Current liabilities	$13,640
	Long-term debt	$2,609
	Deferred taxes	$452
	Other liabilities	$4,159
b	**Total liabilities**	**$20,860**
	Shareholders' equity (a-b)	**$18,293**

Total assets: Things that the company owns and uses to generate revenue, such as cash, accounts receivable, prepaid expenses, inventory, land, and equipment. Components of total assets include:

- Current assets. Cash, a cash equivalent, or something that can be converted to cash within a year.
- Long-term investments. Investments the company plans to hold more than a year.
- Property, plant, and equipment: These are noncurrent assets such as land, buildings, machinery, office equipment, and so on.
- Goodwill: This is listed on the balance sheet after a company buys another and constitutes the value of the acquired company above and beyond its "fair market value." This could include the value of the acquired company's brand, reputation, great customer service, and so on.

Total liabilities: What the company owes, such as unpaid expenses, accounts payable, estimates of future expenses (pensions), value of services paid for but not yet provided (deferred income), or debt used to acquire assets. Components of total liabilities can include:

- Current liabilities: What the company owes to suppliers and creditors that's due within a year of the date on the balance sheet.

- Long-term debt: Debt due in more than a year.
- Deferred taxes: Taxes that will be due in the future as a result of temporary differences between tax accounting and financial accounting.
- Other liabilities: These are often minor liabilities such as small accounts payable.

Shareholders' equity: The investment of the shareholders in the company — much like an individual's net worth. Shareholders' equity is what is left after you subtract liabilities from assets.

The Cash Flow Statement

Some investors also study a company's cash flow statement. Where the income statement shows sales, profit, and earnings for a company over a given period and the balance sheet is a snapshot of assets and liabilities, the cash flow statement follows the cash flowing in and out of a company.

Companies can obtain cash from three different sources. Cash from **operating activities** is the cash a business generates or uses. Cash from **investing activities** covers investments or divestitures, both internal and external. For example, investing activities include buying or selling assets such as buildings, or investing company money in the stock market.

Cash from **financing activities** shows cash coming in from the outside — from banks, investment capital firms, or shareholders. A company can finance an investment or raise funds for operations with cash from issuing stock or debt.

Figure 12.3: Statement of Cash Flow (year ended 12/13/2015)

Operating Activities	
Income from operations	$7,752
Depreciation	$1,068
Sales of equities	-$17
Deferred taxes	$217
Increase in account receivable	-$30
Increase in inventory	-$102
Prepaid and other assets	$132
Accounts payable and accrued liabilites	-$201
Other items	$647
Net cash from operating activites	**$9,291**
Investing Activities	
Purchase of property, plant and equipment	-$2,203
Sales of property, plant and equipment	$68
Purchases of short-term investments	-$14,218
Redemptions of short-term investments	$12,808
Purchases of long-term investments	-$3,713
Sales of equity investments	$80
Other investing activities	-$47
Net cash from investing activities	**-$7,225**
Financing Activities	
Proceeds from long-term debt	$1,837
Repayments of long-term debt	-$151
Increase in short-term debt	$2,351
Decrease in short-term debt	-$526
Common stock issuances	$62
Purchases of common stock (buy back)	-$3,665
Cash dividends paid	-$2,715
Stock option transactions	$711
Net cash from financing activities	**-$2,096**
Adjustments	$96
Cash at beginning of year	$1,099
Cash at end of year	$1,036

Figure 12.3 is a simplified version of a statement of cash flows. Sources of cash appear as positive numbers, whereas uses of cash are negative. In this example, the company produced $9,291 from operations and spent $7,225 million on investments. It spent another $2,096 million on financing, mainly paying dividends. Because the cash from operations almost matched the decreases in cash from investing and financing, the company's cash started the year at $1,099 and ended the year at $1,036. We've only covered the tip of the iceberg here regarding company financial statements. There's so much more

you can learn. But there's no need to wait in the meantime. Keep searching for candidates, completing Stocks Selection Guides, and following BetterInvesting's four principles to build wealth while you learn.

Additional Resources

Introduction to the SSG webinar series: BetterInvesting members have access to these webinars via the My Classes section of the website. This series hosted by Ann Cuneaz, BetterInvesting's Education Program Manager, and Ken Kavula, of BetterInvesting's Mid-Michigan Chapter, comprises Selecting the Best Companies, Determining a Fair Price, Estimating Future Growth, Estimating Future P/Es, and a review session.

Worksheets: These downloadable forms, available through the website's Tools & Resources menu, reinforce the basic information and skills required to complete a Stock Selection Guide. Developed in conjunction with the Introduction to the SSG webinar series, the forms cover company quality, stock valuation, future growth and P/E forecasts, and general guidelines for beginners.

First Cut: Stock studies contributed by members of the BetterInvesting community, First Cuts allow you to compare your judgments with those of like-minded investors. A library of studies is maintained at the website (access through the Tools & Resources menu), and you can sign up for a biweekly email to receive new studies; select Update Profile at the site to modify your email preferences.

Monthly **StockUp** and **TickerTalk** webinars provide investment education as well as discussion of specific stocks. Other periodic webinars detail how to use BetterInvesting's online tools for stock analysis. Check the Events section of the website homepage.

The Events section also includes in-person and online opportunities sponsored by your local chapter. Contact your **local chapter** with any questions you have about BetterInvesting's principles and the Stock Selection Guide. Many chapters also host model investment club meetings during which volunteers can answer your questions about the SSG.

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