Explaining why stocks and the stock market rise and fall, and how they perform over time, has the potential to be an endless, never-ending project. First, to be modest, no one really knows with any substantial degree of precision why stocks rise and fall. The markets are too complicated and they are changing constantly. Nonetheless we can make some broad generalizations about stock market performance, especially if we use history as a guide. And these broad generalizations are potentially useful for the investor trying to get a little edge in making investments.

This chapter therefore is dedicated to discussing general stock market performance at an introductory level. This material can at least get us started. Although this material is very useful when attempting to select individual stocks, mutual funds, or ETPs, this chapter is not as much about individual stock selection as it is about general stock market performance as, for example, measured by an index like the S&P 500.

Here is how this historical approach will be broken down:

1. The role played by corporate earnings and projected earnings
2. The role played by aggregate mutual funds transfers into and out of stocks
3. The impact of inflation and high interest rates upon the market
4. Considering the portfolio effect upon stock portfolios
5. Flights to quality
6. The role played by speculation and momentum
7. The impact of mergers and acquisitions
8. The role played by dividends

Earnings, projected earnings, earnings surprises and disappointments

Generally speaking, stock market prices when measured by a common index representing many stocks, such as the Standard and Poor’s 500 Index, respond over long time intervals to the earnings (also called profits) of the companies represented by the index. The greater their rate of profit, the better their performance as measured by capital gains and losses.

Figure 1 shows this relationship by comparing the S&P 500 index to the average operating earnings (profits) per share of the 500 stocks that make up the index. As can be seen, although there is a strong correlation, the correlation is not perfect. For example, in the years leading up to the market crash that began in March 2000, the S&P 500 was clearly rising a lot faster than the operating earnings of the companies that are included in the index.

When considering an individual stock or even an industry or sector, these earnings, typically measured as earnings per share, will normally matter more than any other variable. But in today’s sophisticated markets static earnings, how much the company made in the last twelve months (shown in the data as ttm for trailing twelve months), is only the starting point. In the eyes of many investors, earnings

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1 For the reader familiar with general accounting principles, reported GAAP earnings are not reliable and should not be used for earnings estimates. Instead operating earnings or free cashflow (not discussed here) should be used. GAAP rules allow companies to register large losses that are anticipated in a single huge writedown in one quarter.
growth matters much more than the level of earnings. Those investors will prefer and pay a premium for a company with relatively low earnings per share but high projected growth in those earnings compared to a company with higher earnings per share but with lower projected earnings growth.

For younger companies, especially in emerging industries with ill-defined markets, sometimes revenue (also called or sales) growth matters more than earnings growth. This is because investors will place a high value on a company that is increasing its relative share of the market, and especially so if it appears that the company in question might dominate the market. It is assumed that the profits will come later.

A metric that is commonly used to compare one company or one industry to another is called the Price-to-Earnings ratio (P/E). The Price-to-Earnings ratio at any moment is the price per share of a stock divided by its annual earnings, usually represented by its operating profit for the last year (ttm) This statistic is also called the trailing P/E ratio.

For example, Intel (INTC) on Sept. 14, 2012 had a closing price $23.37. Earnings per share (ttm) was $2.36, so P/E = 23.37/2.36 = 9.90, which was a low value for a popular technology stock like Intel.

A forward P/E ratio uses the current price divided by estimated future earnings. Current stock market prices are more influenced by expected earnings than current earnings. If estimated (future) earnings begin to rise because of good news, then trailing P/E will typically rise, and that is a logical reaction to the news (up to a point). On the same date as above, Intel's forward P/E was estimated by finance.yahoo at 10.57.
Investors generally prefer companies with high earnings growth rates and these companies typically have higher trailing P/Es than slow-growing companies.

Consider, for example, the relative earnings and share price performance of Apple (AAPL) compared to Microsoft (MSFT) for the period between January 2007 and September 2012, represented in Figure 2.

First, looking at the share prices, AAPL increased in value approximately 8-fold over this period while MSFT remained stagnant (the green line you can barely see at the bottom of the graph). To be precise, the opening and ending AAPL share price was $83.44 on January 3, 2007 and $680.44 on September 7, 2012 versus MSFT share prices of $25.44 and $30.95 for the same dates!

The inset in Figure 2, which shows annual earnings per share for the two companies, shows why. Because of the success of multiple new product releases, ranging from iPhones to iPads, Apple’s earnings soared from $3.93 per share in 2007 to a staggering $43.80 (estimated) per share in fiscal year 2012. In contrast, over the same period, Microsoft per-share earnings over the same period only grew from $1.42 per share to $2.00 per share. The market is clearly rewarding earnings growth.

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2 Corporations can report their earnings by defining their fiscal year as different than the calendar year. AAPL’s fiscal year ends on September 30, MSFT’s on June 30.
The trailing P/E ratio for *AAPL* at 16.25 was higher at the end of this period compared to *MSFT* at 15.60, although not remarkably so. Markets may have become skeptical of the ability of *AAPL* to continue this torrid growth, so maybe this was reflected in a more tepid P/E ratio. Both P/E ratio's were much lower than the high P/E ratios that had been seen prior to the market decline in 2008. For example, in an older comparison used in early versions of this chapter, Google (GOOG) was compared to *MSFT* over a single year, 2005, when *GOOG* earnings grew 82% and *MSFT* earnings grew only 24%. In that example, the *GOOG* ttm P/E ratio was 75 to 1 compared to 25 to 1 for *MSFT*! Those are remarkable for their difference, but also because they are both so much higher than what is seen in 2012 when investors are far less optimistic about the future of technology stocks.

*Estimates* or *Projections* of future earnings, but also *revenue growth* and *cash flow* made by analysts and other market experts matter a great deal when considering the prices of individual stocks or industry groups. Theories of valuation claim that the long-range projected value of profits and/or cash flow of a corporation should strongly impact the present-day market valuation of a stock. In fact, one common theory of valuation claims that the present price of a stock equals the discounted present value of the lifetime free cash flow of a corporation. There is certainly some truth to this theory. Companies that look good over a long horizon to analysts do tend to be market favorites and perform well.

![Figure 3 - Oracle Earnings Surprise on September 21, 2011](image.png)

The problem, of course, with earnings projections is found in the *accuracy* of the projections. A very rosy scenario can be dashed by a string of bad news, and the valuation adjustment (the change in the stock price) can be very abrupt.

This abrupt adjustment sometimes happens when companies either “miss” or “surprise” on their earnings forecasts in their quarterly reports. Publicly traded companies issue earnings reports quarterly. These reports include earnings and sales results for the most recent fiscal quarter, but also include an overview of how the company is expected to do in the near future. These overviews, some of which are adjusted mid-quarter, are referred to as *guidance*. Based upon this *guidance* and other research, stock-tracking analysts form an estimate of a company's earnings. This information is generally available to the public. For example, on *finance.yahoo.com* once the user has asked for a quote for a company like
When companies release their quarterly earnings reports, they almost always do so at the end of the business day after markets are closed. If a company makes an earnings announcement that far exceeds or falls short of the consensus earnings estimates made by analysts, the stock can rise or plunge severely, by more than 10% in some cases. Further, the price may exhibit a discontinuity, where the price does not smoothly move from the old price to the adjusted price, but instead opens the next morning at a price discretely higher or lower than the old price by many dollars.

For example, look at Figure 3 above that shows the effects of a earnings surprise released by database software giant Oracle (ORCL) on September 20, 2011. As can be seen, the stock opened the next day at a price nearly $2 higher than where it had closed the day before! This is an example of a discontinuity caused by an earnings surprise. This happened because Oracle reported quarterly earnings at 48 cents per share, two cents above consensus estimates, revenues at $8.4 billion, about $50 million above expectations, and guidance for the next quarter that was generally optimistic.

The impact of disappointed expectations can be seen in Figure 4 below. On February 1, 2006, Google missed earnings estimates by about 27 cents.
large institutional investors, such as pension funds and insurance companies, hedge funds and enormous inflows from mutual funds, including that component of mutual funds that are reserved for 401-K, IRA, and other retirement accounts. The last two decades have seen a decline in the popularity of defined benefit pension plans and their replacement by 401-K, IRA, and similar plans. The latter have been heavily invested in stocks.

Additionally, the investing public has a much better understanding of how mutual funds work than in generations past and so are willing and able to funnel ever larger amounts of saved funds into equity mutual funds.

The best evidence of the importance of the river of money is provided by the Investment Company Institute, who releases monthly detailed data showing net new fund flows into various categories of mutual funds, including equity funds. Figure 5 above, taken from ICI data, shows Net New Cash Flow to Mutual Funds in recent years for all mutual funds and for stock funds.

Remember, this is the new cash flowing in, and so long as this is strongly positive it will establish a demand floor for stocks. Note the correlation between these changes in the 1990s and the phenomenal bull market of the same period.

So long as this flow continues and stocks remain an attractive investment, this will be the foundation for solid growth. However, in a panic theoretically much of this money will exit just as quickly - or even more quickly, than it arrived. As the Figure 5 shows, in 2000, more than $309 billion net flowed into equity mutual funds, compared to $13 million in 1990. This same figure plunged 90% to $32.3 billion in 2001, which removed the demand floor from the stock market for that entire year. That figure plunged even more to outflows of $27.75 billion in 2002, then fully recovered in 2003 to healthy inflows of
$152.8 billion, perfectly correlated with the market’s 2003 recovery.

This correlation is clear if you compare the peaks and troughs of the river of money in Figure 5 to the chart of the S&P 500 stock index borrowed from an earlier chapter, shown in Figure 6.

Figure 6 – 13 Years of the S&P 500 Stock Index

As can be seen in the same graph, in the serious market downturn that began in late 2007 and continued through 2009, there was a record outflow of funds from stock mutual funds, which greatly contributed to the decline of the market. Given the distress in the credit markets in these years, it would not be correct to say that this outflow caused the market decline. More accurately, it reflected the decline and contributed greatly to its depth and duration.

In 2010 and 2011 equity funds continued to lose assets, although only slightly. But as can be seen in Figure 5, mutual funds in general had a strong positive flow. Almost all of this flow went into bond funds as investors remained wary of stocks and placed their investment bets on interest-bearing note and bond funds, including U.S. Treasury Notes and Bonds, but also corporate notes and bonds. Bond funds offered poor yields in 2011, but were seen as much, much safer than stocks in these troubled markets.

But it is also clear when looking at Figure 6 that the stock rally that began in 2009 was this time not accompanied by stock money returning to mutual funds as had been the case in 2003 to 2007. In this latter rally the correlation has broken down. Without doubt there is a rally, but it is not being fueled by the river of money returning to stocks via mutual funds.

In recent years it has become apparent that data showing the river of money should also reflect net new cash flows into equity exchange traded products (ETPs), also called exchange traded funds (ETFs). ETPs are pooled assets like mutual funds but they have the attractive feature of being directly tradable in
the stock market. An investor can buy and sell them just like stock in a company.³

These funds are increasingly popular with retail investors and are used more and more in retirement accounts and by 2011 net asset value for all ETPs had exceeded $1 trillion. Therefore net flows into these funds are also going to matter and are shown in Figure 7.

**Figure 7 – Net New Cash Flow to Exchange Traded Products (Funds)**

These funds weren't large enough to matter in the market downturn in 2000, but as is clearly seen, fund flows turned sharply negative for all ETPs and domestic equity funds in 2008, as was the case with mutual funds. Equity fund growth resumed in 2009 but was not very strong and the $33 billion growth in 2011 was not enough to offset the $129 billion loss in mutual funds in that same year. So even when you include equity ETP growth in the river of money, the stock market rally after 2010 is not really explained by the river of money, which further implies that it was not a rally fueled by retail investors investing in retirement accounts or through mutual funds and ETFs.

**Inflation and High Interest Rates**

High inflation will *always* be accompanied by high interest rates, but there are times when high interest rates are not associated with high inflation rates (such as when the Federal Reserve System is using high interest rates as the means to prevent an emerging inflation).

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³ An entire chapter will be dedicate to ETPs in a couple of chapters, so the reader is asked to be patient.
Generally speaking, stock prices and high inflation and/or interest rates are inversely correlated. They generally move in opposite directions. Although stock behavior is a function of many more variables than inflation rates, generally, when inflation rates fall stocks view this favorably and have a tendency to rise, but if inflation or interest rates shoot up, especially if unexpected, stock prices usually begin to show resistance to further increases.

A research report published by Bespoke Investment Group and cited in The Wall Street Journal confirms this negative correlation. The report identified five periods of inflation (defined to be any period when the Consumer Price Index rose at an annual rate of 8.5% or more) since 1940. During those inflationary periods the S&P 500 fell an average of 2.15%. Given that the purchasing power falls during an inflation, this implies a double-digit negative real yield on stocks.

This negative correlation is made evident by looking at the performance of the Dow Jones Industrial Average during the most inflationary period of the United States in this century, shown in Figure 8. The left axis shows the Dow Jones Industrial Average monthly between January 1, 1971 and July 1, 1982, which is the month in which the great bull market began that lasted until early 2000. It was also the month that the media began to recognize collectively that the terrible inflation of the 1970s was gone for good because of the effectiveness of monetary policy. As can be seen in Figure 8, the Dow Jones Industrial Average fell significantly during the inflationary period from 1971 to 1981.

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4 Scott Patterson, "Inflation or Deflation?" The Wall Street Journal, October 4, 2010, p. R1. The research article compared stock performance during deflationary periods, where the gain averaged 19.7%, to inflationary periods. The duration of the typical inflationary period was 21 months.
started at 868.50. On July 1, 1982, more than eleven years later, the same index stood at only 808.60.

The index on the right shows the annualized monthly inflation rate for the same period, and it can be seen that there were two inflationary episodes, the second pulling inflation rates above 14%. It can also be seen plainly that when inflation soared in 1974 in the first episode, the DJIA plunged and then when it looked like inflation was solved through 1977, the index rallied and recovered nearly all of this loss.

Other events were going on (these inflations were linked in part to the two Opec Oil Embargoes of the era) that contributed to this lousy decade for stocks, but clearly inflation was a significant macro cause. And considering that this was a severe inflation, the purchasing power of investments in stock actually fell more than 50%. The real return to stocks was hugely negative.

It should be noted that the zero performance implied in Figure 8 is in reference to capital gains only. Some stocks did pay dividends in those year and the dividend payout rate for the S&P 500 stocks was around 2%. But that hardly offsets the inflation of the era and generally very few investors are going to be enthused about a stock market that offers no capital gains.

In part, this inverse reaction can be attributed to a portfolio effect, also called a portfolio shift. During inflationary periods the yields on interest-bearing portfolios, many of which are not very risky, begin to look very attractive compared to much riskier stocks.

Figure 9 shows a simple hypothetical example of a portfolio effect. Professional mutual fund and hedge
fund portfolio managers, responsible for balancing risk and yield in a large investment portfolio consisting of many securities, including a mix of stocks and bonds\textsuperscript{5}, will often favor stocks over bonds. This is also true of sophisticated retail (individual) investors who are pro-active in managing their own investment accounts. These same people, however, often \textit{rebalance} (change the proportion of major classes of investment assets) the portfolios when economic conditions change.

Even though \textit{real returns} (yields adjusted for inflation) are very low or even negative on bonds and notes during inflationary periods, their \textit{nominal returns} (the actual market yields \textit{not} adjusted for inflation) are quite high, often higher than 10\%. It is very difficult for stocks to maintain the same high nominal rate of return through capital gains.

For example, the blue-ribbon \textbf{U.S. Treasury 10-year note} may look much more attractive to investors when it is yielding 7\% than when it is yielding 4\%. This would be true even if the reason for the higher yield is inflation and the inflation rate isn’t much below the new, higher yield (e.g. at 5\%). This is because the inflation is undermining the yields on \textit{all} financial assets, including stocks. One can be confident that the yield-bearing treasury securities will at least stay ahead of the inflation. You certainly can’t extend that certainty to stocks.

![Figure 10](image)

This reaction could result in the sample \textit{rebalancing} shown in Figure 9 – a shift away from stocks (which requires that the stocks be sold) in favor of bonds. If this is done on a large scale, then stock prices will fall in response.

Figure 10 shows this same portfolio effect using the \textit{Supply and Demand} model introduced in Chapter 3. The graph on the left represents the stock market, as measured by the value and daily volume of the \textbf{S&P 500 Index}. The graph on the right shows a simplified image of the bond market. It is not easy to represent all bonds by a single index so here we are using the proxy of a \textbf{30-year United States Treasury Bond} price and volume for the bond market as a whole\textsuperscript{6}. Volume in the bond market here is represented as the dollar value of bonds trader (in billions).

\textsuperscript{5} For convenience, the single term “bonds” will be used to refer to all interest-bearing assets, including bonds, notes, and bills.

\textsuperscript{6} The reader will have to be patient with this part of the example. Bonds as a whole and their pricing conventions are described in detail in a future chapter. Bond prices rise and fall just like stock prices as supply and demand ebbs and flows so accept that as a matter of faith for the moment and accept this example as a proxy until a more detailed explanation is forthcoming.
Keep in mind in the short run that the total portfolio balance for any investor is a rough constant. Although in the long run the pies shown in Figure 9 grow (ideally) or shrink, over the short run only the pieces can be rebalanced.

In the example represented by Figure 10, this portfolio effect is explained by rising interest rates in an inflationary environment, making stocks less attractive (hence the graph on the left) and bonds much more attractive (hence the graph on the right). Only the dominant curve shift is shown, the Supply Curve for stocks and the Demand Curve for bonds. As the legend on the graph points out, the Demand Curve for stocks might also shrink, lowering prices even more, but on lesser volume, and the Supply Curve for bonds might also shrink back, raising prices even more but stabilizing volume. Regardless, in this scenario, stock prices are falling.

**Flights to Quality**

It is worth mentioning that there is a very specific kind of global portfolio shift that has become very common and sometimes substantially disturbs global equity and other markets. Sometimes the global economic news is so bad that it provokes a massive, even if temporary, shift in global portfolios away from stocks and other classes of bonds, like corporate bonds and the bonds of foreign governments, into exclusively United States Treasury Securities because of their perceived safety. When this happens, this is called a flight to quality by the financial media.

The 2008-2010 data for the river of money shown in Figure 5 is a very specific example of a portfolio shift in favor of bonds. This was not because of any inflationary threat. Stocks had been so hammered since 2007 that investors, and especially retail investors, had lost their confidence in stocks and so were rebalancing their portfolios in favor of bonds.

The global flight to quality was happening on a huge scale in the fall of 2011. This flight to quality to U.S. Treasury Bonds and other interest-bearing securities was taking place on such a huge scale that it was depressing yields for those securities to historically low levels.

Essentially what was happening in September and October of 2011 is the same as is represented in Figure 9, a portfolio shift to U.S Treasury securities away from stocks on a huge scale, except this time the cause was not inflation or rising interest rates, it was a pure flight to quality caused by a range of newsworthy global economic problems ranging from a Eurozone sovereign debt crisis to political paralysis in the United States and Europe, combined with evidence that the tepid recovery from the most...
recent recession, supposedly ended in 2009, was weakening and another, harsher recession might be returning.

The evidence of this is seen in Figure 11, which shows the S&P 500 Index compared to the TLT ETF tracking stock that represents the value of a large weighted portfolio of U.S. Treasury Bonds with a maturity of approximately 20 years. Here, only long-term bonds are represented, but the portfolio effect shoveled money from stocks into U.S. Treasury securities across the full maturity spectrum, from 13-week bills to 30-year bonds.

Speculation and Momentum

Substantial excess speculation can push stocks up at exponential rates into ranges that economically make no sense. This can happen for an individual stock, an entire industry, or an entire market, including overseas markets (this discussion is by no means restricted to the U.S. market). This cycle recurs periodically.

Look at Figure 10 below. It shows a momentum ramp, a rapid acceleration of stock prices, that began in the 1990s and contributed to the severe stock market decline that begin in March, 2000.

For the stock market as a whole, such a cycle usually begins when stocks are truly undervalued, justifying a rapid rise, which begins to happen. Then heavy and immediate capital gains produces a market euphoria where speculative investments, in part from unsophisticated investors (even institutional investors) blows the market higher and higher. In the final phase of the market explosion, the only operative variable is momentum. The clear, obvious, and well-publicized profits being made attracts more money which results in more demand, which causes prices to accelerate. Sometimes the rise is exponential in the final phase before the correction, which is sometimes a collapse.

7 We will return to the TLT ETF in the future chapter on ETFs. Until then, regard the price of this ETF as a reliable proxy for long-term U.S. Treasury bonds, because that is what it is.
Sometimes the market is then collapsed by a "feather" - relatively insignificant news. Unfortunately, it is very hard to time the peak. No one knew that March, 2000, would be the peak for this most recent cycle prior to that date. After a year had passed, everyone knew it.

Why rational people and professionals get caught up in this is hard to understand. This is especially difficult to understand when the market actually gives signals that it may be overvalued, such as in the case of stocks, with insanely high \( P/E \) ratios for keys stocks or even entire indexes. For example, the \( P/E \) ratio for many established technology stocks was well above 100 before the 2000 collapse of the market (and many companies had no earnings at all). That compared to an historical average of about 19 for S&P 500 stocks.

Again, overseas markets are also subject to excess speculation, perhaps more so than markets in the United States. And the phenomenon is hardly restricted to stocks. History also provides multiple examples in real estate, precious metals, oil, and other commodities, and even tulip bulbs.

**Mergers and Acquisitions (Buyouts)**

Business combinations are common in market economies and to some extent define modern corporate history. Very few large-cap corporations grew to their present size by simply expanding their own market. Most grew by acquiring other companies.

When two companies of roughly equal stature combine to form one much large company, often renamed, this is typically called a merger. In contrast, when one company, typically larger, buys another and absorbs the latter into the parent company where the identity of the purchased company largely disappears, this is called an acquisition or buyout.

Both mergers and buyouts will always have some impact upon the stock prices of the companies affected. In the case of a merger, analysts will try to figure out if synergies are to be found in the merger – such as economies of scale because of the larger size, savings in costs because of the ability to eliminate redundancy in labor processes or management, the ability to combine retail outlets, the elimination of competition (with each other) and so forth. If analysts can find synergies and shareholders are convinced, then the stock price of the new merged company can rise. On the other hand, if synergies aren’t obvious, the merged company may stall in the markets.

More interesting to stock investors is the impact of buyouts. When a large company buys a smaller target company two large obstacles emerge: (1) If the target company is publicly traded, the buying company must succeed at buying a majority of the stock outstanding from the current shareholders, and therefore must offer a price sufficiently high to do this, and (2) competitors of the buying company may not want this to happen and so, in response, may trigger a bidding war for the stock of the target company, each side pushing the offer price higher and higher.

The final typical effect is to push the stock price of the target company to a very high level relative to where it was prior to the buyout effort.

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8 But not always. Sometimes the brand identity of the acquired company is of such value that the company name and other branding trademarks are preserved.
An example (and this is not an unusual example) is shown in Figure 13. After the stock market closed on Monday, September 13, 2010, tech giant HP announced that it was making an offer of $43.50 per share to buy a security software company ArcSight (ARST). ARST had been trading the day before this announcement at just a little above $35 per share. This was part of an acquisition binge by HP to expand the scope of their business by earlier buying 3Com and smartphone loser Palm.

In Chapter 3 we saw a supply and demand model for another example - the Google acquisition of Motorola Mobility (MM). In that example the share price of MMI went from $24.47 to $38.13.

Generally, a buyout is almost always beneficial to the shareholders of the target company (there are some historical exceptions). The impact upon the stock of the buying company is historically mixed. Often such buying sprees must be financed with debt, and it is obvious from the example given above that some investors may think that a company paid too much for a target company. Therefore the stock of the buying might initially respond by declining or simply remaining tepid for awhile. Over the long run, when the synergies of the buyout become more obvious (if that happens), then the stock of the parent company should rise to reflect the growth.

These business combinations affect the stocks involved more than the market as a whole, but when the pace of mergers and acquisitions picks up in a market, stock market growth in general can benefit.

**Dividends**

Although the primary investment objective of buying stocks is realizing capital gains, dividends paid by
stocks certainly matter. When capital gains are hard to come by because of poor market performance, investors will often shift their stock selections more in favor of dividend-paying stocks (which is another type of portfolio shift within the equities component of an investment portfolio).

In the summer of 2012, 402 of the 500 companies in the S&P 500 index paid dividends. The dividend yield average about 2.25% for these.9

Stock dividends are paid quarterly. The dividend yield, also called the dividend rate at any point in time is equal to the amount of the annual dividend in dollars divided by the price of the stock at that time. For example, on September 14, 2012, Intel (INTC) was paying an annual dividend of $0.90 per share and the stock was trading at $23.37. Therefore the dividend yield equaled 0.90/23.37, or 3.85%.

There are two important dates involved with quarterly dividend payments. First, the payment date is the actual date on which the dividend payment will be credited to the shareholder who was on record on the record date, which is usually about a month before the payment date. For example, for Intel's third-quarter dividend for 2012, the record date was August 3, 2012 and the payment date was August 31, 2012. This meant that if you were the shareholder on record on August 3, your account would receive the dividend payment on August 31, regardless of whether you still owned the stock on August 31. Likewise, if you were to buy the stock after August 3 but before August 31, you are holding the stock ex-dividend, which means that you are not entitled to the next dividend payment.10

Source: Data for this are taken from Standard and Poor's Index Services downloads at http://us.spindices.com/indices/equity/sp-500


10 To see Intel's dividend payment schedule, see http://www.intc.com/dividends.cfm
Because dividends are fixed by votes of the Board of Directors of any company paying the dividend, and are therefore “sticky,” or slow to change, it should be obvious that if the stock of a dividend-paying company declines sharply, then the dividend yield will rise. So long as the reason for the decline does not threaten a suspension of dividend payments (it often does) then such stocks can become popular among yield-seeking investors, potentially putting a floor on the decline.

Figure 14 shows the fluctuation in dividend rates between the fourth quarter of 1988 and the third quarter of 2013. As can be seen, in the 1980s and 1990s dividends slowly fell out of favor as investors opted more for capital gains and companies kept cash to help finance growth. But with the poorly performing markets of the last decade, dividends are once again on the rise, mostly because investors are now more inclined to seek dividends, which requires companies to pay them if they want to remain popular with investors.

The large spike above 3% in late 2008 and 2009 was caused by the fact that even though stock prices were declining sharply, many companies continued to pay their dividends for awhile, causing the yield to rise. The rapid retraction from the spike in 2009 largely reflects the inability of companies during that recession to raise sufficient cash to continue to pay dividends.

General Economic and Business Conditions

Periods of stable business conditions and general high profitability, with relatively little uncertainty, seems to produce a healthy environment for stocks. Not easily quantifiable, there is sometimes almost a healthy, stable "atmosphere" for stocks. Good investors learn to sense this after some years of experience.11

There is no strong evidence that mild recessions have any significant effect upon stocks. For example, the stock market fared relatively well through the mild recession that began in July 1990 and ending in March 1991, and was slightly higher at the end of this period.

Because stock investors are so forward-looking, even prior to the beginning of a strong economic recovery at the end of a mild recession, stocks will begin to rise. Aggressive investors and speculators will want to take advantage of the rally before it begins, and ironically, begin the rally!

But a deep and longer recession, such as the one that began in late 2007, is another matter. As has already been explained above in the section entitled Flight to Quality deeper and more dangerous recessions can really pull the stock market down.

This is perfectly consistent with everything else that has been presented in this chapter. The chapter opened with the argument that in the long run stock prices were most sensitive to earnings projections and earnings projections had to be confirmed by actual earnings performance as time passed.

When referring to the stock market as a whole, over long periods of time profits can't really grow unless

11 This topic is quite controversial and many economists would disagree, at least in part, with what is said in this section. One well-known study by financial economist Jay Ritter demonstrated empirically that when considering data from 1900 to 2002 from many countries, including emerging markets, correlations between real stock returns and per capita GDP growth is actually negative. In his research Ritter does conclude that "stock prices decline when the probability of an economic recession increases, and stock prices increase when the probability of economic recovery increases," which is consistent at least up to a point with what is being argued in this section. See Jay R. Ritter, "Economic Growth and Equity Returns," Pacific-Basin Finance Journal 13 (2005), pp. 489-503.
the economy grows. And if an economy remains weak and threatened, as has been the case in recent years, few rational minds could easily forecast near-term profit growth. And if at the same time the risk environment is perceived to be globally dangerous, the flight to quality shown earlier in Figure 9 and the stock market decline associated with it were perfectly logical.