PICKING STOCKS

A PRACTICAL GUIDE TO INVESTING IN THE STOCK MARKET

IVY BYTES

Investing in the Stock Market: A Primer

By Ivy Bytes

Contents

Created by Ivy Bytes

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Introduction

This introduction will briefly look at important differences between stock-picking and investing. It will also discuss how you can use this briefing most effectively, and explain how this guide was made. If you want skip this and jump to Chapter 1, click here.

An Important Caveat

The subject of this book is active investing in the stock market, or "stock-picking". A common mistake that novice investors make is to confuse "stock picking" and "investing." For most individual investors, money devoted to actively selecting individual stocks should be a small fraction of their entire retirement savings. The rest should go into diversified mutual funds or ETFs.

For a broad introduction to the investing field, please see A Beginner's Guide to Investing: How to Grow Your Money the Smart and Easy Way. This short and to-the-point guide explains how you can achieve returns that are virtually guaranteed to exceed those of an average investor, while putting in as little as four or five hours *a year* thinking about your investments. For multiple reasons, A Beginner's Guide to Investing suggests that most investors would be better off minimizing fees and putting the majority of their investments into a "lock-box" composed of passive "buy-and-hold" strategies that are designed to mimic the performance of the stock market and other major asset classes like bonds, commodities, and real estate.

A major reason for this is the well-documented historical inability of the average investor to earn a return that is greater than that of the overall stock market. As will be discussed briefly in the guide, the stock market is mostly "efficient" in the sense that stock prices are likely to incorporate most information that an average individual investor would know.

However, A Beginner's Guide to Investing also suggests putting 10 or 15% of assets into a "sandbox," which is an account that you can responsibly "play" with by actively picking the stocks that you want to own. This is the subject of this guide. In Finance terms, A Beginner's Guide to Investing was mostly about achieving "beta" - or market-average returns. This book is mostly about achieving "alpha" - or beating the stock market through picking individual stocks that out-perform the market averages. While getting alpha is several order of magnitudes harder than getting beta, it is the opinion of this briefing that investors that know that know their

limitations and think strategically about how they want to make their investments have a good shot at achieving market-beating returns.

How to best use this guide

Ivy Bytes' series of guides add value versus existing books by getting you up to speed on a subject faster than anything else in the market. In this spirit, you should not read any section that you are already familiar with.

- Every chapter begins with a one or two sentence overview of what is going to be discussed. If some of this material looks like something you already understand, skip to the sections that are more relevant by clicking on the in-text links.
- If you feel that you would not gain anything from reading the chapter at all, you can quickly jump to the next chapter using the in-text link.
- If you want to dive further into a topic, you can click-through in-text links directly on your e-reader, tablet, or smart phone.
- The Further Reading section at the end of each chapter contains a list of the best sources of more material on the topics covered in the chapter.

How this guide was made

Our process for creating Ivy Bytes guides is simple:

1. We collect the information that you previously would have found by doing multiple google searches, reading hundreds of pages of books, and analyzing countless articles
2. We analyze this trove of information and pick out the most pertinent, important, and well-supported pieces of it, the kinds of things that everyone that is fluent in a topic should understand.
3. We organize this material into 20-40 pages of easily-digestible content.

Chapter 1 will start off by looking in a little more detail and what a "stock" really is. Chapter 2 will explain what actually happens at a stock exchange, and what the stock quotes that you see on websites and in newspapers really represent. Chapter 3 will begin our look at valuing individual stocks by examining a concept called the time value of money. Chapter 4 will explain "Discounted Cash Flow Analysis", a technique practitioners use to determine the "fair value" of a stock. Chapter 5 will analyze the importance of price-ratio analysis in selecting individual stocks. After looking at all these valuation tools, Chapter 6 will step back and talk about why not every cheap stock is a "buy." Chapter 7 will discuss the Efficient Market Theory, and why every individual investor should understand it, even if it is not true. Chapter 8 will look at the importance of earnings and expectations in influencing the performance of a stock. Chapter 9 will conclude with presenting a game plan that individual investors can follow to have a good shot at achieving returns that exceed those of the overall stock market - the goal of any stock-picker.

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Books:

A Beginner's Guide to Investing: How to Grow Your Money the Smart and Easy Way

Herman Cain: Everything You Need to Know

Chapter 1: What a Stock Really is, and the Nature of Ownership in Modern Capitalism

This chapter will look at what it really means to "own" a stock, and reflect on why the modern definition of this "ownership" is so constrained and nebulous. In the process, it will cover important issues in corporate governance. Skip this - jump to next chapter

What it really means to "own" shares of McDonalds

When you need money to purchase something that you currently cannot afford - such as a car, house, or new appliance - you can go to a bank and take out a loan. In return for receiving a loan from the bank, you agree to make an interest payment every few months until you have paid off the loan in full. When a company needs to purchase something that it cannot afford - like a new factory or piece of equipment - it has the additional option of bypassing a bank and going directly to investors who have extra money that they would like to earn a return on.

There are two ways that an agreement between the company and investors can be structured so that each gets what it wants. The first option is a bond. A bond is similar to a bank loan in that the company agrees to pay the investors an interest payment every period (usually every six months), and then to repay the original loan amount in full at the end of the bond's term. The second option is to issue stock.

Issuing stock involves selling partial ownership of the company to investors. If the company is successful in its investments, it will earn additional profits in the future. After investing a portion of these profits back into the business to build even more factories or buy even more equipment, the company may split the remaining earnings among all the owners, in equal proportion to the percentage of the company that each owns.

A key difference between stocks and bonds is the risk/reward equation for investors. With a bond, investors' upside is limited - the best they can do is receive fixed interest payments and get their money back at the end of the term. With a stock, their upside is unlimited, because they can share in the profit growth of the company.

The company's view, of course, is precisely the opposite. For a company, issuing stock may be a more flexible and less risky source of funding if it is planning a project that may have uncertain results. If a project is

unsuccessful and a company has taken out loans (or bonds) to finance it, the company may not have enough cash to pay back its loans. It may have to declare bankruptcy, and in effect be taken over by its creditors (the purchasers of the bonds). On the other hand, if the company issued stock to finance the project, it could just stop paying any dividends for a few years. This is very important - bond holders expect to get their money back from a loan on a fixed schedule, but stock holders accept the chance of losses in exchange for the potential for higher returns. This makes stocks more risky for investors than bonds, but less risky for the company issuing them.

So if I am an owner of McDonald's, why do I still have to pay for hamburgers?

It is important to understand just what owning shares of a company like McDonald's means. Ownership is not an altogether clear concept in the modern economic system. While it is true that owning shares of a stock like McDonald's does mean that you own part of the company, your rights and privileges as an "owner" are pretty much limited to collecting dividend checks. There are a few good reasons for this:

1. The amount of the company that you own will likely be miniscule. McDonald's has 1.03 billion shares outstanding as of its last reporting quarter. So if you own 100 shares, then you own one one-ten-millionth of the company. Not quite enough of a stake for employees at the cash register to remember your name...

2. There will be hundreds of thousands of other "owners" like you who will invariably have different ideas about how the business should be run. It would be a massive coordination problem trying to involve you all in any kind of business decision.

3. Many of the "owners" know nothing about the fast-food business. It would not make sense to channel business decisions through them.

On the surface, this presents a bit of a problem. If the owners of the company are not fit to manage it, then who is? The solution devised by the markets is to hire a professional management team to run the company for the ostensible benefit of the shareholders. So technically, if you own a share of McDonald's, the CEO and the rest of the management team work on your behalf to make sure that the company generates as many profits as possible, thereby maximizing your future dividends.

Of course this does not really remove the problem of coordinating amongst owners, since someone must still choose who the management team will be. Even agreeing on who to hire to a management team would be a nearly impossible coordination and knowledge problem for the hundreds of thousands of McDonald's shareholders to solve. The solution is a smaller 5-

15 person Board of Directors that is responsible for representing the shareholders of the company by overseeing the selection and ongoing monitoring of the management team. Board members are bound by what is called a *fiduciary duty* to shareholders. This means that they are legally obligated to look out for the best interests of shareholders above their own best interests.

But in reality of course, the coordination and knowledge problems of having multiple owners are not so easily solved. The "oversight" problem never really goes away, no matter how many levels you take it to. Even agreeing on a Board to oversee the management team that oversees the business is problematic. Technically, shareholders appoint board members by a majority vote. But shareowners come from all across the country and the world, and there is no way they could agree on a common set of people that they trust to represent their interests. The result is that board members are often appointed to their roles by the management team - the same team that they are suppose to supervise! In some cases, they may even be the CEO's golfing buddies! The conflict of interest here should be obvious - in many cases the CEO gets to hire his or her own bosses.

Disgruntled shareholders do have some options for trying to "take back" a company from a management team that they feel is holding it hostage or taking too much of its value for themselves. Companies are required to have an annual shareholder meeting at which time shareholders can vote on different measures and express their general grievances.

But most decision-making still happens through the Board. So to really take control of a company, shareholders would need to get their own candidates onto the board. This can be difficult - while companies are required to hold some kind of election for the board members, in most cases this is just a "Soviet style" up/down vote with only one person running! Sometimes very large shareholders are able to nominate candidates to run against the management's choices, but winning what is called "proxy fights" can be quite difficult and expensive. Dissident shareholders attempting to win a hostile proxy fight must contact all of the other shareholders of the company and convince them to vote against the management's choices and for their own choices. Most shareholders find this too difficult and

expensive to manage. Instead, they would rather just sell their shares to someone else if they are unhappy with a company's direction.

The potential conflict of interest between management and shareholders is actually a pretty serious and fundamental issue with modern capitalism. Before the days of the modern stock market, most companies were owned and operated by the same person or family. This resulted in very clear incentives for the manager, since it was his or her money to lose. While the fractional share ownership system has many advantages in terms of capital allocation (more on this later), it also has very real costs. One of these is the cost for investors to monitor the management team. This is one of the primary functions that active investment managers serve in the economy.

What good is being an owner if I can't tell anyone what to do?

The reason to own stocks for the long term is to collect dividend payments into the future. When a company makes a profit, it will usually distribute a portion of the money to its shareholders in what is called a dividend. These payments can occur on a quarterly or annual basis. If you own a stock for a long time and the company does well, the value that you get in dividends over your life time may dramatically exceed the price that you paid for the stock at the time of purchase.

In the short-term, of course, you may also be able to make a profit by selling your shares to someone else for a higher price than you bought them for. It is the price that these secondary exchanges of shares take place at that is reported in the newspaper every day. But if the buyers in these transactions are rational, they will not be willing to pay more money than they think the dividends will be worth in the future. We will talk more about the process of buying and selling shares of a stock on a *secondary exchange* like the New York Stock Exchange in the next chapter.

Chapter 2: The Nature of a Stock Exchange, and What Happens When You Decide to Buy a Share of McDonalds

This chapter will look at what actually goes on in a modern stock exchange, putting into concrete terms what "buying a stock" really means. Skip this - jump to next chapter

Order Origination

To buy a share of a stock, you first must have an account with a company called a "brokerage" that has the technology and relationships necessary to trade stocks. In the old days, this brokerage would employ actual people ("Stock brokers") that you could call on the phone and manually give your order too. These brokers might have also actively called you with stock tips or general financial advice. This kind of model is now known as a "full service" brokerage, and it still exists through firms like Morgan Stanley.

A newer model is the online-only discount brokerage, practiced by companies like ETrade and Ameritrade. Discount brokerages operate more of a "self-serve" model, in that they leave the customer responsible for order entry via a website, and they usually do not offer any guidance or advice from an investment professional. However, discount brokerages usually charge much lower fees for each trade than full-service brokerages do.

Whether your order is entered manually via your discount brokerage's website, relayed verbally to a full-service broker, the next step is the same. Your broker sends your order to an exchange like the New York Stock Exchange.

What Really Happens at the Stock Exchange

The nature of what actually happens at a stock exchange has changed a lot over the past ten years. The largest and most famous stock exchange in the United States is the New York Stock Exchange (NYSE). For most of its history, trading at the NYSE took place between human beings on an actual "exchange floor" located in downtown Manhattan. Each brokerage firm would have to buy a "seat" at the stock exchange, which would entitle it to have its own traders or clerks present on the floor. When a customer issued an order to buy or sell shares, the firm would relay the instructions to its representative on the floor, who would be responsible for executing it, or finding another trader to execute it.

To avoid a complete madhouse, there were set "stations" of the floor devoted to trading particular stocks. At these stations a special trader known as a "specialist" would reside. The specialist's job was to facilitate an orderly market for his stock or stocks - essentially matching buyers and sellers by running a continuous auction. Traders that wanted to buy or sell stocks would tell the specialist, who would match them with the person offering the best price on the other side of the trade, i.e. the person willing to offer the highest price if you were buying, or the lowest price if you were selling. In situations where there were not enough buyers or sellers present to find a match, the specialist could also buy or sell shares out of his or her own inventory by acting as a "market maker."

Today, most trading occurs electronically rather than on a physical exchange floor. Once you enter your order, it is automatically transferred to the exchange via your brokerage's computer systems. The order process works much like the floor, except instead of a specialist standing at a physical location and keeping track of who is willing to buy or sell at what prices, a computer database simply records the information and automatically matches buyers and sellers.

To visualize how this happens, we need to add one more piece to the puzzle. When you enter your order with your broker, you actually have a choice of how you want it to be executed. You can use a "market order" - which tells your broker you want to execute the order immediately at the best price

available, or you can use a "limit order" which tells your broker you only want to buy or sell at a particular price. For instance if you want to buy McDonald's shares and use a limit order with a price of $20 / share then your order will only be executed if someone is willing to sell those shares to you for $20 or less. The database (or specialist) keeps a record of all these limit orders, arranged by their price, which like the table below:

Bids (Buy orders)	Asks (Sell Orders)
$19.99 x 300	$20.01 x 100
$19.97 x 1000	$20.03 x 500
$19.95 x 200	$20.05 x 1000
$19.90 x 300	$20.07 x 400

Suppose someone in the market above entered an order to "sell 300 shares at market." The trade would immediately be executed at the price of the highest bid (buy offer) for 300 shares, or $19.99 a share. If someone entered an order to "sell 1300 shares a market", 300 of those shares would be sold at $19.99 and 1000 would be sold at $19.97.

With electronic exchanges, there is no "person" designated with keeping track of these orders and ensuring an orderly market. However, there are electronic market-making firms that make money by ensuring a liquid market. Market-makers in an electronic sense are simply traders that are willing to both buy and sell large amounts of a stock at the same time. For instance, a market maker might be willing to buy up to 5,000 shares of McDonald's at $19.99 and sell up to 5,000 shares of McDonald's at $20.01. By doing this, the market maker can capture the two cent spread between the price they are buying and selling. So if in one minute someone comes in and buys 500 shares at market, and in the next minute another person sells 500 shares at market, the market maker can pocket 500 x 2 cents = $10 for providing this liquidity.

The usefulness of stock exchanges

To see why stock exchanges are useful, imagine what the process of buying a stock like McDonald's would be like without them. Stocks do not just appear out of nowhere - you would have to find someone that already owns the shares and is willing to sell them to you in order to complete the purchase. This would not be easy in itself. Suppose you were lucky enough to find that your neighbor owned shares you were interested in buying and was considering selling them. Even then you still would not know the fair price to buy the shares from him for. And how would you know there is not someone else in a town a few miles away that might be willing to sell you the same shares for less money?

Put differently, though stock prices seem to appear magically out of the pages of the newspaper or yahoo finance every day, every quote coming across a ticker actually represents a real exchange of shares for money between two consenting investors or traders. The "prices" that are reported are simply the prevailing prices that these exchanges are taking place at. Without stock exchanges, there would be huge costs to buying or selling a share, since you would have to search long and far for the person on the other side of the trade that would give you the best price. The stock exchange provides a central place that everyone that is in the market to buy or sell shares can go to and be confident that they are always getting the best price because everyone else is there too.

Further Reading

Admittedly it's from an odd source, but howstuffworks.com has a pretty good guide to background on the stock market. This is recommended reading if you are still unclear about stock market background.

Chapter 3: The Time Value of Money and How to Think About What McDonald's Future Dividends Are Worth Today

The objective of any long-term investor is to purchase a stock for less money than it is truly "worth." This chapter will take up the topic of what the long-term worth of a stock really is. It will reiterate why the value of a stock comes from its dividends, explain how you can determine the present value of future dividends using something called the time value of money, and wrap up by talking about the market risk premium. Skip this - jump to next chapter

It's All About Dividends

As we saw in the last chapter, in the short term stock prices merely reflect the prevailing price that stocks change hands for on major secondary exchanges. This price, in turn, reflects the supply and demand for shares of that company. If there is a change in one of these variables, then the price will adjust in order to clear the market (equal number of buyers and sellers). For instance if the supply of shares on the secondary market goes up because the economy has entered a recession and many people need to sell their investments to raise cash and pay off their bills, then the price will have to adjust downward in order to entice more buyers to step in and clear the market (supply always has to be meet demand).

In the long term, what drives "demand" for a stock is expectations about the future value of a company's dividends. Remember from the last chapter that receiving dividends in the future is the only reason to own shares in a totally rational world, since an investment is only valuable if it will give you cash in the future. Taking this a step further, in a rational world the price that you should be willing to pay for a share of stock is the *current value* of its *future dividend stream.* This is known as a stock's *intrinsic value.* You can think of it as the value that a person who planned to hold a stock *literally forever* would receive as a result of cashing dividend checks. But this, of course, brings up a number of questions. How do we calculate the *current value* of future payments? And how do we even know how many dividends the company will pay in the future? We will discuss the first of these below and leave the second for next chapter.

The time value of money

The concept of a *time value of money* might seem a bit strange, since it seems like $1 should always be worth $1 pretty much be definition... But given the choice between receiving $1 now, and $1 five years from now, most people would rationally prefer to receive the $1 now. There are different levels of reasons for this. At one level, $1 today will probably buy you more things than $1 five years from now, because of inflation. For instance, a pound of bread cost $.20 in 1980 but $1.10 in 2010, so in bread terms a dollar in 1980 was worth 5 times a dollar in 2010. At another level, if you had $1 today, you could do something with it, like invest it. Even if you put it in an ultra-safe investment like a CD (Certificate of Deposit), you could get back more than $1 five years from now.

So how much is $1 five years from now worth *today?* One way to think about this is to extend the example from above and imagine having to choose between a smaller amount of money today versus a larger amount five years from now. If you were offered a choice between ten cents today or $1 five years from now, most people would take the $1 five years from now. You would have to get a great rate of return on a ten cent investment today to get $1 five years from now. There will be some point though, be it 75 cents, or 80 cents, or maybe even 90 cents, where you would be indifferent between receiving the smaller amount of money today and $1 five years from now. The amount where there is indifference is precisely the amount we mean when we ask what $1 five years from now is worth. In other words, if you are indifferent between receiving 80 cents today or $1 five years from now, then $1 five years from now must be worth 80 cents to you today. If we can find the value of $1 five years from now in this way, then there is no reason we cannot also assign a value of $1 at any point in the future - 1, 3, 7, 10, 13 years into the future. This is precisely what we need to do to find the current value of an expected stream of dividends from a stock.

When evaluating a potential investment, we can estimate the time value of money by looking at the returns that we could get on holding an alternative risk-free asset like a government Treasury bond. Imagine we are evaluating

the value of a stock that is expected to pay a single dividend of $100 ten years from now and then go bankrupt (this, of course, is not a realistic example but is useful for illustrative purposes). To determine what price we should be willing to pay for the stock today, we could start by looking at the price of a zero-coupon US Treasury bond. A zero-coupon Treasury Bond is effectively a loan to the US government for ten years. At the end of the loan, the government guarantees that they will pay us back $100. If a 10 year $100 zero-coupon bond is currently selling for $80 (meaning that you can pay $80 today to get back $100 ten years from now), then we should not be willing to pay more than $80 for the stock. Why? Because if the stock cost more than that we could just invest in the treasury bond instead and receive the same outcome for less money.

In fact, if the stock is risky we may be willing to pay significantly less than $80. This is because, all things equal, we would much rather own the risk-free bond then a stock where there is a significant chance that we may not be paid back anything at all.

The "Market Risk Premium"

The flip side of the saying that we should be willing to pay more money for a risk-free bond than a risky stock is saying that over time, and on average, we should expect risky stocks to return more than risky bonds. To see why, consider the example above. Though a zero-coupon bond and our hypothetical dividend-paying stock are both expected to give us $100 ten years from now, we might be able to buy the stock at $60 and the bond at $80. If everything goes as expected, the return on the bond would be 100/80 or 25% on our initial investment. With the stock we would get a 100/60 or 67% return on our initial investment. On an annualized basis (calculating percentage return per year), this works out to a 5.2% annual return on the stock and a 2.3% annual return on the bond. The difference between the returns of stocks and bonds - or about 3% a year in this example - is known as the "market risk premium." This is the additional expected return that investors demand in order to hold stocks instead of risk-free bonds.

One of the things that makes determining the fair "intrinsic value" of a stock so difficult is that even if you were able to perfectly predict future dividends (which, as we shall see in the next chapter, is quite a stretch), the fair value of stocks could still vary widely if the market risk premium changes. This can be the case in significant bear-market recessions like 2008 when there was a sudden loss in appetite to take risk. In this kind of environment, investors may shift from demanding a premium of 1% or 2% a year in order to feel comfortable holding stocks, to demanding a premium of 5% or 6%. This can have an enormous impact on stock prices even if there are no fundamental changes in the long-term prospects of the underlying businesses at all.

The market risk premium for US stocks is generally estimated to be around 6% per year, meaning that in the past, stocks returned 6% more than bonds. However the risk premium can vary considerably from year to year and decade to decade. Some experts estimate that the forward-looking risk premium (which is what really counts) may be only 3 or 4% today. One way to estimate the forward-looking risk premium (the amount that stocks can be expected to outperform bonds over the long term) is to estimate the

future returns of stocks and compare this to the 30 Yr Treasury Yield (the return you would get from holding a 30 Year US Government bond until maturity). The future return for stocks can be estimated as the dividend yield plus the growth rate in dividends plus any expected change in the dividend yield (the latter accounts for a change in stock market valuation). Using the dividend growth rate over the past twenty years of roughly 4% and a current dividend yield of 2.1%, this would mean that you could expect stocks to roughly return 6% a year over the next ten years or so[i]. By comparing this to a ten year Treasury rate of 2% (as of Oct 2011) and a 30 Year rate around 3%, we could estimate the current risk premium at between 3 and 4% a year.

Further Reading

- For the more academically inclined, Triumph of the Optimists is a thoroughly well-researched work that looks into the stock market returns and market-risk premiums in a number of countries over the past hundred years.
- Stocks for the Long Run is a more readable and less expensive version that presents many of the same arguments, written by a professor at the Wharton School of Business.
- Aswath Damodaran has a paper that discuss the market risk premium in more detail

Chapter 4: Estimating Future Dividends, and How to Calculate and Use Free-Cash Flow to Value a Company

In the last chapter, we focused on how you should think about the role that the time value of money and the market risk premium play in determining how much you should pay today for the promise of dividends sometime in the future. In the process, we glossed over the important issue of actually estimating the amount of dividends a company will pay in the future. This chapter will look at the theoretically correct method that practitioners to estimate future cash flows and calculate the "correct" price of a stock - something called a "Discounted Cash Flow Analysis" or DCF. Skip this - jump to next chapter

Using Free Cash Flow as a Proxy for Dividends in Valuation

To estimate what we expect dividends to look like in the future, we need to first know a bit about accounting and the economics of a business. A normal company takes in revenues from its customers and pays expenses to its employees and suppliers. The difference (Revenues - Costs) is profits. But not all of these profits will be redistributed to shareholders in the form of dividends. A company will also make investments in additional plants, property, and equipment so that it can continue to grow into the future. The money that is left over after these investments is what is called "free cash flow," and this is the pot of money that could be distributed to shareholders.

You might notice that we mentioned a "Discounted *Cash Flow"* analysis above, and not a "Discounted *Dividend* Analysis." Theoretically, both are possible, but there are several reasons why most practitioners prefer to value a company by discounting free cash flow, and not dividends.

On a year to year basis, the company may not actually pay all free cash flow to shareholders. It may instead decide to pay back debt, to buy back shares of its own stock on the secondary markets, or to build up a cash reserve. Even if a company chooses not to pay a dividend immediately (many large companies like Apple still do not), there are good reasons to think that the free cash flow "belongs" to shareholders. This is because whatever a company does with its free cash flow, it should increase shareholder value. Reducing debt increases shareholder value by reducing the amount of money the company must pay back to creditors before returning money to shareholders. Buying back shares increases shareholder value by increasing earnings per share and future dividends per share through spreading the same amount of profits over less shares. Adding to cash increases shareholder value by increasing the amount of money that will be available to pay dividends in the future.

For these reasons, when valuing a company's shares, it is common practice to discount its free-cash flow rather than its dividends. A major advantage

of this approach is that free-cash flow estimations do not depend on a company's dividend payout policy, which can be difficult to predict.

The Difficulties in Forecasting the Future of a Business

To predict free cash flow into the future, you need to know how much a company is going to earn (Revenues - Costs), as well as how much of those earnings it will need to reinvest into the business in the form of inventory or new capital purchases. It is worth pausing to reflect on the difficulty of this task by considering just how many variables affect this (by no means a comprehensive list):

- **Technological Change**. There could be a new technology that comes along and wipes out an entire industry. For instance, Underwood typewriter company was a major brand of the last century until the personal computer came along and completely destroyed its business of selling typewriters.

- **ompetition**. There could be a sudden change in competition. For instance, Wal-Mart has changed the game for both grocery stores and mom-and-pop retailers by competing aggressively on price.

- **The Economy**. The economy could fall into recession. For instance, the economic collapse in 2008 dramatically lowered the expected purchases of automobiles every year. Consumers went from purchasing more than 16 million new cars a year in 2008 to less than 10 million in the depths of 2009. This had a huge impact on auto manufacturers, who were not able to cut their costs quickly enough to make up for this gigantic drop in revenues.

- **Government Regulation**. There could be a change in government regulation. For instance, Microsoft was forced to unbundle many of its products from its Windows operating system because of anti-trust legislation from the government.

The point is that estimating the intrinsic value of a stock is a highly uncertain - almost unknowable - exercise. With that fair warning then, let's jump into it.

How to evaluate a company's financials

To begin to assess how a company is going to do in the future, it makes sense to thoroughly understand its financials today first. A good starting point for these is a company's financial statements. In the United States, companies are required to file these with the Securities and Exchange Commission (SEC) once every quarter. A more lengthy report called a 10K is to be filed every year at the end of the fiscal year.

These reports are freely available on the SEC Edgar website at http://www.sec.gov/edgar/searchedgar/companysearch.html. One of the most important sections of the report is the presentation of the company's financials. The SEC mandates that companies provide four financial statements: a Balance Sheet, an Income Statement, a Statement of Cash Flows, and a Statement of Changes in Owner's Equity. Each of these must be prepared according a set of Generally Accepted Account Principles (GAAP). Popular finance websites like yahoo finance and google finance will also provide you with these crucial statements. Understanding the first three of these is particularly important to getting a feel for how a company is doing. For our purposes in assessing a company's ability to produce free cash flow, we will work primarily with the Income Statement and Statement of Cash Flows.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
R Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2010

or

£ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number 1-3950

Ford Motor Company

(Exact name of Registrant as specified in its charter)

Delaware	**38-0549190**
(State of incorporation)	*(I.R.S. employer identification no.)*
One American Road, Dearborn, Michigan	**48126**
(Address of principal executive offices)	*(Zip code)*

313-322-3000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which regi**
Common Stock, par value $.01 per share	New York Stock Exchange
7.50% Notes Due June 10, 2043	New York Stock Exchange
Ford Motor Company Capital Trust II 6.50% Cumulative Convertible Trust Preferred Securities, liquidation preference $50 per share	New York Stock Exchange

* In addition, shares of Common Stock of Ford are listed on certain stock exchanges in Europe.

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes R No £

Indicate by check mark if the registrant is not required to file reports pursuant to section 13 or Section 15(d) of the Act.

How to Read an Income Statement

When doing any kind of analysis, it is important to try to get as much history on a company as possible. Usually companies will show results for the last two or three years in their financial statements, but you should dig back further if possible. Find a site like google finance that will give you the

historical data, or dig up a 10K from a previous year through the SEC Edgar service.

The first place to start with an Income Statement is at the very top with the revenue figure, which represents the total value of a company's sales during the year. This figure might not have much relevance on its own, but a lot can be learned from how revenues have varied over the years. It can be useful to make a separate Excel spreadsheet just with year to year growth rates of key financial metrics in it. Have revenues grown? Shrunk? What has happened with the rate of revenue growth - does it seem to be speeding up or slowing down? Are revenues volatile from year to year or do they tend to follow a steady path? Understanding the answers to these questions - and even more importantly understanding *the business reasons* behind movements in the numbers - will be crucial to developing an accurate forecast of revenues in the future.

The next place to dig into a company's Income Statement is the gross profit and operating profit lines. Gross Profit is revenues minus the costs it takes to produce or purchase goods, but not to sell them. Operating profit is profits after subtracting out the costs of both producing and selling its goods, but not taxes, interest expenses, or other one-time costs like settling large lawsuits or shutting down factories.

While growth rate was the primary factor to consider in looking at revenues, it is margin that is essential in looking at gross and operating profits. "Gross margin" is just gross profit divided by revenue, while
"operating margin" is operating profit divided by revenue. Each represents how much of revenues are kept as profits, and are measures of how profitable a company is. Margins can vary widely across industries - with manufacturers sometimes getting 40% gross margins while retailers may be lucky to hit double digits. It is important to understand where a company's margins stand relative to its competitors, and whether the ratio seems to be expanding (a good thing) or contracting (bad).

Finally, it is essential to get an idea of what the cost structure of the business is like. Which line items are the most significant cost? Do these seem like they would be fixed costs that are independent of volume (such as a manufacturing company running a large factory - no matter how many goods they are selling, there is a fixed cost to running and maintaining the factory)

or variable costs like the inventory that a retailer purchases (if customers stop purchasing products the retailer will simply buy less inventory, so costs go down proportionally to revenue). Understanding the difference between fixed costs and variable costs is crucial to getting an income forecast right. This is particularly important for a company that is growing rapidly - if most of its costs are fixed over time than you would expect margins to widen and profits to grow exponentially, while if most of its costs are variable than you would expect margins to remain relatively flat and profits to grow in more of a straight-line.

Table - The different types of profits

Revenues	Receipts from sales to customer
- Cost of Goods Sold	Subtracts out the direct cost of buying/making products
= *Gross Profit*	
- Selling, General, and Administrative Costs	Subtracts out the cost of selling products, and other administrative costs of running the company
= *Operating Profit*	
- Interest Expense	The charge the company has to pay to borrow money
=*Net Pre-tax Profit*	
- Taxes	
= *Net Profit*	
+ Non-cash charges	Adjusts for differences between accrual accounting and cash accounting
Operating Cash Flow	
- Capital Expenditures	Subtracts out money the company is using to invest in its own operations (expand factories, etc.)
= *Free Cash Flow*	

Once you have gotten a feel for how a company makes money today, you can take a stab at estimating what profits could look like in the future. At the most simple level, a "back of the envelope" way to do this is to make a prediction about what is going to happen to revenue growth and profit margins. These two variables will be the "drivers" of your analysis. These estimates can be based on your own view of the company's prospects in the future, informed by what is going on in the rest of the industry as well as what is going on in the economy. For instance if the company you are

looking at is in an industry that you know has been growing at 15% for the past 5 years, then you might want to pencil in a 15% growth rate as your initial estimate for revenue growth. As you develop your research, you can consider whether you expect the industry growth rate to slow down or speed up in the future, as well as whether you expect the particular company that you are looking at to exceed or fall below the growth rate of its industry.

Once you have profits projected for many years into the future, you can then think about free cash flow. To find free cash flow from net profits, you need to know two additional pieces of information : cash flow from operations (CFO), and capital expenditures. The first of these (CFO) is a measure of the actual cash that a company receives from its operations during the year. It might seem like this is precisely what net profit was suppose to measure. But under what is called "accrual accounting," revenue, costs, and profits are recognized when the sales/costs are realized, rather than when cash actually changes hands. For example, a company recognizes a "depreciation" expense every year to reflect the wear and tear on its plants and equipment, even though there is no actual cash flow until it actually replaces the plants and equipment. As an investor, it is cash that you are primarily concerned about, since cash, not "net earnings," is the currency that investments are made in (You will not get paid from your investment off "net earnings").

To reconcile cash accounting and traditional accrual accounting, companies must provide a Statement of Cash Flows. Various methods exist for projecting these into the future - the simplest and easiest first-cut is to take an average ratio of CFO / Net Income for the past five years or so and assume that this ratio will remain relatively constant in the future (there are many cases where this might be a bad assumption - but our goal here is to illustrate what a DCF is rather than really get into the weeds). Similarly, you can take a ratio of capital expenditures to sales and use this to project capital expenditures in the future.

Seem like a lot of work? It is, and we didn't even get into the question of what rate you should discount the dividends at (for more on that, look for our upcoming work on valuation). Exercises like this are useful to do in order to get an understanding of a business, but they are not very accurate in terms of actually forecasting a stock price because there are just too many variables with high degrees of uncertainty. Even Wall Street analysts that do this kind of discounted cash flow analysis will frequently "cheat" by starting

with their final answer (the stock price they think is warranted) and figuring out what kind of assumptions they need to have in order to justify that. In the next chapter we will look at some far simpler shortcuts that you can use to get an idea of how much a company is worth without going through all the work of a discounted cash flow analysis.

Further Reading

- For those that want more of a textbook-treatment of the mechanics of a DCF, Valuation: Measuring and Managing the Value of Companies is the Bible on the subject.

- Financial Statement Analysis: A Practitioner's Guide gets into the weeds on the accounting aspects of a DCF.

Chapter 5: Price Ratios, and How to Use Them as Shortcuts to Figuring Out if You Are Paying Too Much for a Stock

This chapter will look at several "rule of thumb" approaches to stock market valuation that involve ratios. These are less sensitive to assumptions than a pure DCF approach. Skip this - jump to next chapter.

The PE Ratio

The discounted cash flow models that we described in the previous chapter have two big advantages. First, they are the theoretically correct way to value a stock, so if you apply the "correct" assumptions, you will get a theoretically "correct" stock price down to the decimal point. Second, and more importantly, the process of going through the DCF exercise tends to teach you a lot about the business you are analyzing and how it operates. However, as we pointed out, the big problem with a DCF analysis is that is incredibly sensitive to changes in assumptions - particularly the long-term growth rate of revenues and the discount rate / time value of money that you are using (which we did not even get into in detail...). And it almost impossible to know what assumptions are "correct."

Thankfully, there is an alternative to this kind of analysis. For a quicker way to see if a stock price looks "cheap" or "expensive" relative to its intrinsic value, analysts use various ratios of a company's stock price to the fundamental performance of its underlying businesses. The most common of these is the price to earnings ratio, or PE (commonly said "P" to "E", "PE Multiple" or just "Multiple"). To calculate this important ratio, simply find the price per share of a stock, and divide this by its earnings per share (which you can find from the bottom-line of the Income Statement, or from just about any financial website). This ratio is of limited use on its own, but it can be very useful in when compared to:

1. The average multiple the company has traded at in its past
2. The average multiple for stocks in the overall market
3. The average multiple for companies in its industry.

Comparing the PE multiple of a company to its competitors, the overall market, and its own past history can give you a sense of whether the shares look "cheap" or "expensive" (lower is better...). Best of all, this "rule of thumb" approach does not rely on many assumptions at all. Once you have more experience in analyzing stocks you will develop an intuitive feel for

what kind of a multiple a company "should" be trading at based on a host of other factors that we will go through in the next few chapters.

The logic of the PE ratio is pretty simple. What you are paying for when you buy a stock is really its earnings. Of course, it is the dividends that make a stock valuable in the long-term. But if you trust management (and this can be a big if... we will get into this later...), then you have to think that they are going to reinvest whatever earnings they do not give back to shareholders into the business in order to grow dividends even more in the future. Since price is what you are paying for when you buy a stock, and earnings is a measure of what you are getting, the price to earnings ratio makes good sense as a measure of "value" (what you are paying relative to what you are getting). Over the past fifty years, the average P/E of the overall stock market has fluctuated between about 8 and 30, with the average around 15.

In using multiples, you are, in effect, piggybacking on the work of the market. It is like saying "I know I should do this complicated DCF analysis to determine what price I should be willing to pay for these shares, but I already know how much money the company is making, and I know how the market is valuing similar companies in its industry as well as how it has valued this company in the past, so why don't I use that information instead of making a bunch of wild-guesses on future growth rates?"

Other ratios - P/S, P/B, Div Yield, FCF Yield

While the "P to E" is the most common ratio because of its straightforward calculation and interpretation, there are many other ratios that you can also calculate to get a feel for whether a stock is cheap or expensive. Four of the most important of these are Price to Sales (P/S), Price to Book (P/B), Dividend Yield, and free-cash flow yield.

- Price to Sales (P/S). Just as it sounds, calculate this by dividing the price that a company's shares sell for versus its revenue per share. There are two ways to calculate this ratio. Financial sites such as yahoo finance will give you a company's *market capitalization.* "Market Cap" for short, this equals the price per share of the company multiplied by its total number of shares outstanding, and is a measure of how much the total company is worth. You can divide this market capitalization by the annual revenue for the company ,which you could find on the Income Statement. Or you can calculate the sales per share first by dividing the total revenue by the number of shares outstanding - and then divide this by the stock price. P/S ratios can be useful for companies that currently have negative earnings. Care should be taken to not inappropriately compare ratios across industries though, as the P/S ratio will depend on the nature of the business. A retailer like Wal-Mart that has extremely low profit margins will have a much smaller P/S ratio than a manufacturer like Apple.

- Price to Book (P/B). The "Book Value" of a company is an accounting measure of the net investments that it has made over its lifetime. The simplest way to think of it is the total equity investment in the company to date, including initial capital from shareholders and reinvested profits in the course of the business' history.

This is the first ratio that we have looked at that is based off of a "Balance Sheet" measure of a company rather than an Income Statement measure. While the Income Statements represents the yearly "flows" of a company, the Balance Sheet is a measure of "stocks," or the cumulative value of those flows over time. When earnings flow in from the Income Statements they initially increase a company's assets, which can be things like cash, property, land, and other investments. Similarly, when costs enter through the income

statement, they appear as liabilities on a company's balance sheet. The difference between Assets and Liabilities is what we call "Equity. " It is an accounting measure of the value of shareholders investments. The "Book" value in a P/B ratio is simply the value of equity.

This can be seen through an example. Imagine a company raises $10,000 from investors and takes out another $10,000 in debt. It earns $5,000 in profits in its first year, which it reinvests into the business. At the end of the first year, the company will have $25,000 in assets($10,000 + $10,000 + $5,000). With this $25,000 it spends $20,000 on a factory and has $5,000 in cash. You can think about book value two ways. The first is the total amount of money that has been invested in the business by shareholders - which is the $10,000 initial investment + the $5,000 of reinvested profits from the first year, or $15,000 total (the $10k in debt does not count since this is owed to bond holders or a bank).

The second way is to think about what the balance sheet of the company would look like. Balance sheets provide useful measures of assets and liabilities. Assets are the things that a company has that have real value or that can produce earnings in the future. Liabilities are the things that the company will have to pay for in the future. The Balance Sheet of our hypothetical company would look like this:

Assets	Liabilities
$5k cash	$10k Debt
$20k factory	

For total assets of $25k and total liabilities of $10k. **The difference in assets and liabilities, $15k, is the company's book value**, which can be interpreted as what equity shareholders would have left over if the company ceased operations, sold off all of its assets, and paid back liabilities.

The logic of the price/book ratio is easiest to see if you imagine that you are evaluating the purchase of a small business. One thing you would definitely want to know in this situation is what the businesses' assets are actually worth. If the net assets of the business were worth more than you would be paying for them, (P/B < 1) you might be interested in buying the company just to get a hold of them. For instance, if you are considering buying a retail

store, you might find that the value of the land, property, and inventory that the store owns is greater than the price you would be paying for it. This can be the case for companies that own a lot of real estate at a time when land prices are going up a lot, like the early part of this decade. In these cases, the land that a company has on its books might be worth more than its stock price - so it would make sense for it to just shut down its operations and sell off all of its assets. On the other hand, if a company was selling for many times the value of its net assets, you might wonder if it would be cheaper to start your own company from scratch.

P/B ratios are most used when looking at companies in industries with lots of "real assets" and few "intangible ones." Real assets are tangible things that you can buy or sell - like factories, equipment, land. Intangible assets are things that have a lot of value but that you cannot buy or sell - like brands, customer loyalty, technology. Coca-Cola is a good example of a business with lots of intangible assets - a competitor could come along and build the same factories, but it would lack the incredibly value "Coke" brand name. Because of this Coca-Cola (KO) has a very high price/book ratio (currently around 5).

- Dividend Yield ("Yield"). Going back to our original theory that the value of a stock is the current value of all expected future dividends, it might seem like it would make sense to look at a ratio of the stock price to current dividends. Indeed, this is something that analysts will look at, though they usually flip it around and look at the dividend yield, or the annual dividends per share divided by the stock price. This can be interpreted as the percentage of your initial investment that you will receive in income every year. For instance, if you are paying $20 for a stock and it has paid a $1 annual dividend the past couple years, then you will get 5% of your money back every year. Again, you should compare this dividend yield to the market average, the industry average, and the average yield the company has had in the past.

A higher than average dividend yield could be a sign that a company looks cheap, but the reverse is not necessarily true. Many high growth companies like Apple will decide not to pay dividends for a number of reasons. Sometimes they need to reinvest the money in their business in order to grow. Other times they just like to build up a cash reserve in case the economy turns south or they want to acquire another business. In other

cases, the company might decide that buying back shares of its own stock is a more tax efficient way to give money back to its shareholders. This is because dividends are taxable distributions - so shareholders have to give a portion of them to the Federal Government. Buying back shares has some of the same effects as increasing dividends without the tax penalty, since it lowers the number of shares outstanding and therefore increases earnings and eventually dividends per share. It can also be a way to increase the demand for the company's shares in the short-term.

- Free Cash flow yield (FCF). Finally, just as valuing a company based on its free-cash-flows in a DCF analysis can be a good way to get around some of the difficulties of predicting a company's future dividend payout policy, so too can using a FCF yield sometimes be a good substitute to using a dividend yield. As a reminder, free cash flow is equal to a company's cash flow from operations (CFO) minus capital expenditures. A FCF ratio is especially pertinent for large and mature companies, like a GE or Wal-Mart. These companies should have relatively constant capital expenditures, so FCF may be a better measure of the actual cash that could be returned to shareholders than earnings or dividends. For younger and faster growing companies that are still reinvesting much of their profits in future growth, the ratio might be less meaningful. These kinds of companies are still trying to grow their businesses and are not in "cash harvesting" mode just yet.

	Price to Earnings (P/E)	Price to Sales (P/S)	Price to Book (P/B)	Dividend Yield	Free-cash flow yield (FCF)
Calculation	Share Price / Earnings Per Share (EPS)	Total Market Cap / Total Net Revenues	Total market Cap / Book Value (Assets - Liabilities)	Dividends per share / Total Market Cap	Free Cash Flow (CFO - Capex) / Market Capitalization
Good for	Great first-take on a normal company with positive earnings	Companies with negative earnings, start-up companies, comparing companies w/ similar businesses	Companies with "real" assets, cyclical companies, manufacturing companies	Dividend-paying companies, Mature companies	Mature Companies, slow-growers
Not Good for	May not be meaningful for companies with negative earnings, companies going through restructuring, or companies that are highly cyclical (earnings fluctuate widely from year to year)	Comparing companies w/ different business models	Companies with mostly intangible assets like brands, technology, etc.	High growth companies that are re-investing in the business. Companies that have chosen to distribute money by repurchasing shares of their common stock	High growth companies that are re-investing in the business

Chapter 6: Moving Beyond Valuation, or the Reasons Why Not Every Cheap Stock is a Buy

This chapter will look at the factors that can effect what kind of ratio a company trades at, including a company's growth rate of earnings, its capital efficiency, and the quality of its balance sheet. Skip this - jump to next chapter.

Valuation is a starting point - not an ending point

At the individual stock level, you should be careful not to assume that "cheap" automatically means "good stock to buy." There are many factors that can affect what kind of a multiple a stock will command in the market. Three of the most important are the growth rate of earnings, the capital efficiency of the business (a measure of how much money they need to invest in order to get an additional $1 in earnings), and the balance sheet of the company. We will look at each of these in turn.

Growth Rate of Earnings

Imagine two companies that are each earning $10 a share today. Company A is selling at $300 for a PE multiple of 30, while company B is selling at $100 for a PE multiple of 10. Company A certainly looks "cheaper," but this does necessarily mean that it is a better value to investors, just as a $99 TV is not automatically a better value than a $400 TV.

To see one hypothetical reason why, imagine that Company A is a young bio-technology firm that has recently filed a patent for a successful treatment of a common type of cancer, and imagine that Company B is a regulated utility company that provides gas and electric services to the regional Washington state area. Though these two companies might have similar earnings *today*, it is obvious that there is a potential for company A to have much higher earnings in the future. Of course, the current shareholders of company A will realize this and demand a higher price to sell their shares *today* because of this. Therefore, company A will justifiably sell at a much higher PE multiple than company B. Whether or not this represents "overpricing" or "value" depends on how successful you think company A can be in the future. If company B was in a dying industry (think horse and buggies when automobiles came along or typewriters at the advent of the personal computer) then it might justifiably trade at an even lower PE multiple.

So how can you tell how fast a company's earnings are going to grow in the future? It is very difficult, perhaps impossible, to make precise quantitative predictions with any accuracy. More important is to have an understanding

of the business and a view of whether fundamentals (sales) are going to improve or deteriorate in the future. This is one reason it can be helpful to go through the exercise of a DCF analysis even if you take the "final result" with a grain of salt. For a quick and dirty look at earnings growth, you can look at the trajectory of earnings over the past decade as well as Wall Street analysts' estimate of the company's earnings in the future. You can find estimates of this year's earnings as well as next year's earnings on popular sites like yahoo finance. Of course, it is always essential to understand these estimates in the context of what is going on qualitatively in the business and the industry.

One "back of the envelope" way that analysts may try to incorporate a company's growth prospects into the PE multiple is by looking at what is called a PEG (pronounced like "peg") ratio. This is simply the PE multiple divided by a company's expected 3-5 year earnings growth rate. So if company A was suppose to grow earnings at a 30% rate over the next 3-5 years, then it would have a PEG of 1. If company B was only supposed to grow earnings at 5% over the same period, it would have a PEG of 2. Based on this ratio, company A looks like the better buy even though it has a much higher PE ratio. The PEG ratio is a very inexact measure, but it can be helpful in pointing out that companies that are growing at different rates should have different multiples.

Capital Efficiency

Though earnings are a very important metric, as we pointed out before what you really want as a long-term shareholder is dividends. The ability of a company to convert earnings into dividends is partly dependent on how much of their earnings they need to reinvest each year in order to achieve their target rate of earnings growth. A company with very high capital efficiency will not need to make very many investments. A company with very low capital efficiency will have to invest a lot of money in plant, property, and machinery each year in order to sustain its business and produce more earnings.

Two good measures of capital efficiency are Return on Equity (ROE) and Return on Capital Employed (ROCE). ROE can be found from most financial sites like yahoo finance, or you can calculate it by dividing the

bottom-line net earnings of a company by its book (equity) value (the same value that we used to calculate the price/book ratio in the previous chapter). ROCE can be calculated as (Net Income + Interest Expense) / (Total Debt + Equity). Both these ratios are a measure of earnings (return) over total money invested. The logic is that companies that have produced high earnings per dollar invested will probably have to invest less in the future than companies that have produced relatively low earnings per each dollar invested.

Two things are relevant about ROE - the absolute value, and the trend. The absolute value should be above 10% for a "good" business. It is important that a company earns more on the money it invests than it has to pay (implicitly or explicitly) for access to that money. Since the denominator in ROE is "Equity," we should compare the ROE to the "cost" that a company has to pay for its equity capital. Of course, there is no direct cost to the company from issuing more shares and taking in more money from shareholders, so the "direct cost of equity" is 0. However since the stock market returns about 10% a year on average, we can think about there being a 10% "opportunity cost" to shareholders who have given up their money. This is because if earnings were given back to shareholders, they could have reinvested the money in other stocks. Therefore, if you are purchasing a stock for more than the net assets of its books (in other words, a P/B > 1), it's ROE should be significantly greater than 10%. It follows that:

- A company that cannot earn a ROE of greater than 10% over the long term is effectively wasting its shareholders money. Its shareholders would be better off if it ceased operating, liquidated its assets, and returned the proceeds to shareholders, who could re-invest it in companies with higher returns.
- On the flip side, you should be willing to pay a slightly higher multiple for a company that has an ROE of above 20% than you are for a company that is only at 10-15%. The higher-returning company will not have to invest as many earnings back into its business to produce growth - so shareholders will be able to "own" more of its profits.

In addition to the absolute value, the trend in ROE is very important because what you really care about as an investor is not what returns a company is earning today on investments that it has made in the past, but it

is what returns a company will earn in the future on the incremental investments it is making today. A steadily improving ROE may be evidence that a company is earning high returns on incremental capital invested even if the overall ROE looks poor because of unwise investments in the past. Similarly, a steadily falling ROE or ROCE may be evidence that a company is getting lower returns on their current investments than they were able to get in the past.

Balance Sheet

A final thing to note in interpreting any valuation ratio is the health of a company's balance sheet. Companies with very unhealthy balance sheets - think bank stocks in 2008 - may trade at what appear to be very cheap valuations based on book value or earnings. What makes a balance sheet "unhealthy" can be subject to investor interpretation, but the general idea is that anytime the market questions a company's ability to continue to finance its businesses by raising capital, bad things will result.

Two things that can cause the market to begin to question a company's ability to finance its existing assets are large and growing debt, and assets that are decreasing in value.

- **Large debt** is problematic because interest payments usually are a fixed cost - meaning that they do not vary based on revenue. So if earnings fall due to a recession or new competition entering the market, a company that has lots of debt may fail to generate the cash it needs to make its interest payments, resulting in bankruptcy. A company with less debt has more flexibility to survive a downturn since its fixed costs are lower.

- **Falling asset values** are problematic both because they will result in lower cash inflows in the future than had been anticipated, and because in extreme cases they can cause lenders to question a company's solvency.

The first of these can be evaluated using more handy ratios. The second requires following news and press releases from a company and watching for anything that could require asset impairments. Some ratios to use to get a handle on how much debt a company has include:

- **Debt / Equity ratio**. Calculate from Balance Sheet using (Short-term Debt + Long-term debt) / (Total Common Equity). A measure of how a company has historically financed its new operations. There are generally three choices: take out new debt, reinvest earnings, or issue new stock. The latter two are considered "equity" since they come directly or indirectly from shareholders. A Debt/ Equity ratio of 1 or more indicates "significant" leverage. One above 3 is getting into a dangerous zone.

- **Debt / EBITDA**. EBITDA is "Earnings before Interest, Taxes, Depreciation and Amortization." Depreciation and Amortization are added back because they are non-cash charges that reflect the deterioration in investments that a company has already made (such as the slow decay of a factory or a piece of equipment). The logic of this ratio is that EBITDA is the maximum amount that a company could put towards interest payment every year, if it wanted to completely cease expanding its business. A Debt / EBITDA ratio of 4 or above is entering the "danger" zone.

- **Interest Coverage, EBITDA / Interest Expense**. The most basic ratio, this measures the ability of a company to continue to make interest payments on its existing debt. Should be above 3 to be comfortable.

As an investor, you want to be acutely aware of staying on top of any balance sheet issues. Once the market decides that a company's balance sheet is in question, things can spiral downhill very fast due to a rather technical topic called "debt overhang." In simple terms, once a company's survival has been questioned, it can become very difficult for it to raise either debt or equity to make payments. This is because new investors will rationally fear that the new capital will just go to benefit existing investors by directly or indirectly paying back their claims.

Further Reading

- For the bible on value investing, read The Intelligent Investor by the legendary Benjamin Graham.
- If you are up for more discussion of valuation ratios and fundamental analysis after that, Security Analysis is the textbook of financial analysis.
- For a shorter read, NYU Professor Aswath Damodar has a helpful briefing on value investing on his website.

Chapter 7: The Efficient Market Hypothesis and Its Implications for stock-pickers

This chapter will look at the logic of the Efficient Market Hypothesis, analyze the evidence for and against it, and argue why understanding its logic is essential for individual investors even if it is not entirely true. Skip this - jump to next chapter.

The strong underlying logic of the EMH

If you have been following the text closely so far, you might be feeling understandably upset about the number of contingencies so far. To review, some of these include:

- A stock with an intrinsic value that is lower than its share price is a screaming buy, *but* intrinsic value is highly sensitive on assumptions about the time value of money
- It is possible to estimate the time value of money from Treasury Yields, *but* the market risk premium - the amount of extra compensation investors demand to hold risky assets - can vary unpredictably
- Ratios like the P/E, P/S, and P/B can be great "rule of thumb" shortcuts to help find cheap stocks, *but* stocks might be justifiably cheap due to slow growth, low ROE, or a deteriorating balance sheets.

There is actually a good reason why we have to be extremely careful to ask the "buts" and extremely cautious of anything that seems "too good to be true" in the investing world. That reason is the efficient market hypothesis.

The Efficient Market Hypothesis (EMH) was formally developed in the 1960s at the University of Chicago. It has different forms, but generally asserts that stock prices already incorporate all known information. A corollary to this is that an individual investor can only out-perform the overall stock market as a result of getting lucky (correctly guessing by random chance which companies will have unexpectedly positive news in the future), taking more risk (assets that may fluctuate wildly in price should return more than more stable assets over the long term in an efficient market, since investors will demand a premium return in order to be compensated for the risk), or possessing inside information.

Whether EMH actually holds or not is subject to fierce debate which we will delve into a bit below, but it is essential for even the most ardent anti-EMHer to understand its underlying logic before trying to pick any individual stocks. The logic of EMH basically comes down to the fact that

risk-free profits should not exist. To see why, imagine there are two different assets that are expected to produce similar cash flows for investors in the future. If one asset is trading at $98 a share while the other is at $100 a share, it would make sense to sell the one at $98 and buy the one at $100. But if enough people started doing this, the prices would quickly converge because everyone would want to sell the overpriced asset and sell the under-priced asset until this was the case. The "supply" of sellers of the first asset at $98 a share would disappear, as would the supply of buyers of the second asset at $101.

In the stock market today, most trades take place between professional investors like hedge fund managers, mutual fund managers, and professional traders. These investors are highly motivated to do thorough research and analysis on the companies they are buying. Thus, there is reason to think that obvious pricing discrepancies like the one above would ever be allowed to exist. This is known as the "no arbitrage" condition, and in its extreme case it means that all stocks are "rationally" priced and that there is no way to make excess profits in the stock market.

Under the EMH, what drives market volatility (movement in share prices) is news. Anytime there is new information that is released to the market, that information results in a nearly instantaneous adjustment of share prices as you would expect from the theory of intrinsic value in order to incorporate the news. But under EMH, mis-pricings (divergence between intrinsic value and market price) are only fleeting in nature.

Supporting Evidence from Mutual Fund Returns

One prediction from EMH would be that it would be nearly impossible to earn returns above the market without taking more risk than the market. Extensive research on mutual fund returns has confirmed that professional investors as a whp;e fail to beat a passive index of all stocks over time:

- In the five year period ending at Dec 31, 2010, Standard and Poor's estimates that 62% of all US large cap equity funds were out-performed by the passive S&P 500 benchmark[ii].
- Academic surveys of research done over the past twenty years have shown that actively managed funds as a whole underperform the stock market by a level equal to their fees, implying the average investor would have been much better off with a low-cost index fund or ETF.

However, this does not necessarily imply an efficient market. In fact, in a world where all equity trades are taking place between professional investors, it would be nearly impossible for active investors as a whole to "beat" passive investors, since it would be active investors who would determine stock prices.

A better measure of market efficiency might be whether "smart" investors can reliably beat the market or not - something that EMH would prevent if true (this is distinct from investors beating the market from luck - there will always be some investors that out-perform the market due to random chance). On this, the evidence is somewhat mixed, but again generally tilted towards the efficient market argument. Most studies indicate that past performance is a poor measure of future long-term performance. In other words, buying the mutual funds that have performed the best in the past would not be a profitable long-term strategy. This would seem to indicate that those mutual funds' past performance was a result of luck rather than any "skill" in identifying mispriced stocks.

Of course, there is strong anecdotal evidence that some investors do manage to repeatedly perform better than the market averages. Famous investors

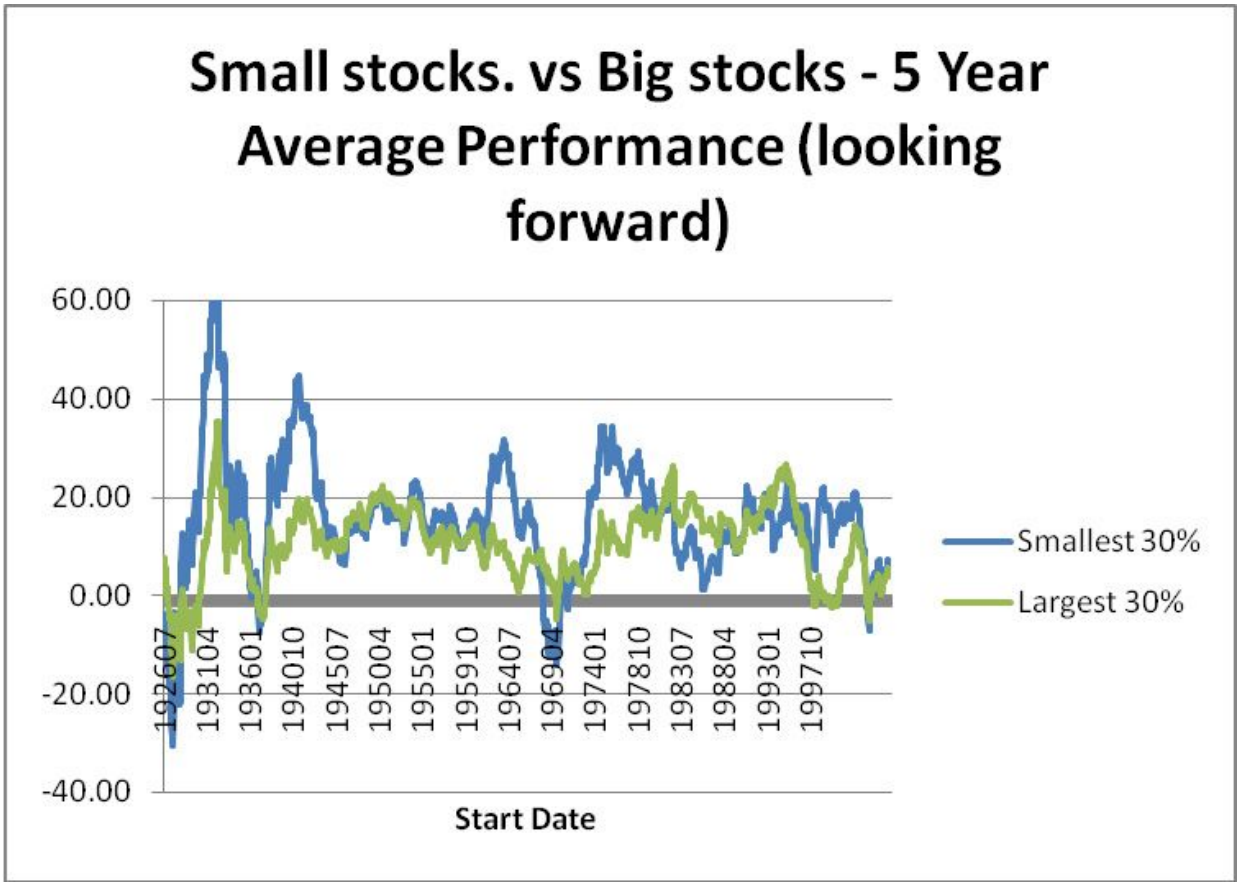
like Warren Buffett, George Soros, and other top hedge-fund managers have seemed to beat the odds, with levels of past success that would be very unlikely to occur in a purely random world. Indeed, some studies by famous financial economists have lent weight to these anecdotal observations by indicating that the top 2% of manager's do seem to be capable of consistently producing alpha. However in many cases the strategies that these managers run are off limits to the individual investor. And fees may still capture most of the out-performance.

Counter-evidence from factor returns

While data from mutual-fund returns seems to mostly support a weak form of the EMH, several well-known *anomalies*, or deviations from the expected behavior, complicate the picture.

Three generally accepted "anomalies" to EMH (many more are less accepted...) are the size effect, the valuation effect, and the momentum effect.

Research on the *size* effect shows that companies with smaller market capitalizations have historically outperformed those with large market capitalizations, even after controlling for their higher risk. Research conducted by Eugene Fama and Kenneth French and available at French's excellent website[iii] shows that stocks with market capitalizations in the smallest 30% of companies in the data set out-performed those with market caps in the largest 30% by an average of 4.5% a year since 1926, when the data set begins. Small stocks had an average annualized return of 15.4% vs. 10.8% for large stocks. While quite impressive, this outperformance was volatile, as the chart below shows that there were many five year periods when large stocks actually outperformed small stocks. In fact, while small stocks outperformed impressively overall, they did so in only 49% of all individual months.



Research on the *valuation effect* shows that companies with low price/book (P/B) multiples have historically outperformed those with higher P/B multiples. Again using research from Kenneth French's Dartmouth website, a portfolio that bought the lowest 30% of stocks by the p/b ratio every year and held them for a year would have returned an average of nearly 18% a year, versus only 12% for an equally-weighted portfolio of stocks with an average multiple. This is quite significant out-performance. Again, this out-performance did not persist over every time period.

Research on the momentum effect shows that companies that have performed the best over the past six months to one year tend to perform better than the set of companies that have performed the worst over a similar period.

Of course, the EMH would imply that as soon as an anomaly becomes popularized, it will likely cease to exist. This can be seen in an example. Imagine that stocks always went up on Fridays and down on Mondays. If this anomaly became widely known, many would try to buy stocks on

Thursday afternoon, right before the close, and sell them at a similar time on Friday afternoon in order to capture this Friday bounce. But if everyone tried to buy shares on Thursday afternoon and sell on Friday afternoon, by simple supply and demand prices would have to go up on Thursday and down on Friday. The Friday boom would turn into a Friday bust.

Investors that try to take advantage of any proclaimed anomaly must be very aware of the potential for this dynamic to show up again and again. As soon as it appears that "easy money" is available on the table, thousands of aggressively return-seeking fund managers will immediately run to try to grab it.

Implications for Individual Investors

While the degree to which stock prices are efficient remains a subject of debate, the evidence from investor returns shows that for the majority of individual investors, they might as well be. Market efficiency has some sobering lessons for aspiring stock-pickers that remain unconvinced of its full validity:

- If something seems like "easy money", pause. Remember that thousands of other professional investors have observed the same facts as you and decided to pass. Ask yourself what you could be missing.
- Always approach an investment by understanding *why* the stock is trading like it is first. Only then consider if you think the market is right or wrong. For instance, do not buy a stock that is selling at a discount to its industry on a number of metrics just because it looks cheap. First, understand why that stock may be cheap, then develop your own view on whether the valuation is justified or not.
- emember that there is always someone else "on the other side of the trade." Could this person be more informed than you or know something that you do not? What do you know or realize that the person selling the stock to you is missing?

Further Reading

In addition to the sources directly cited in the text, interested readers may wish to consult the following:

- A Random Walk Down Wall Street makes *the* definitive case for the efficient market hypothesis. It is written by a professor who as long studied the field, and is well worth reading.
- The Myth of the Rational Market: A History of Risk, Reward, and Delusion on Wall Street is a new book that provides a readable presentation of the other side of the story.
- For the academically inclined, a seminal paper on apparent anomalies to the EMH is available free from a University of Chicago Booth website.

Chapter 8: The Expectations Game, or What Stock Market Analysts *Really* Do All Day

This chapter will look at what the market is *really* focused on from a day-to-day basis - news. We will start by looking at the importance of earnings announcements, including how hedge funds have turned investing into a quarterly earnings prediction game, and how individual investors should play this game. Finally, we will look at momentum investors, and again examine the impact on individual investors. Skip this - jump to next chapter.

How Hedge Funds Make Money by Predicting Quarterly Earnings Numbers

You may recall from the previous chapter that the efficient market hypotheses predicts that it is news events that will drive stock prices. In other words, stock prices will nearly instantaneously react to new information entering the market.

Some of the biggest news events that drive the prices of individual stocks are earnings announcements. In the US, companies announce their financial results every three months. Prior to the announcement, Wall Street analysts will feverishly work on building their own predictions, called "earnings estimates." The average of these predictions is known as the "consensus earnings estimate" and is generally thought to be built into the stock price (in other words, this is what the market expects). Companies that outperform the consensus earnings estimate usually see their stock price go up, while those that fall below the consensus surprise the market in a negative way and generally see their stock price go down.

For many hedge funds, investing has essentially become an earnings prediction game. These professional investors try to predict the direction of a company's earnings announcements better than anyone else, knowing that if they are right the market will move in their direction after the announcement. Of course, with so many analysts trying to outguess the market, outguessing the market actually becomes progressively harder and harder. One of the things that makes it so hard is that the market's expectations are not always obvious. Sometimes if enough hedge funds are expecting an announcement far above the Wall Street consensus earnings estimate, a stock will actually go down if it only narrowly beats the consensus number. Of course, hedge funds do not tell the market what they are expecting, so it can be hard to guess exactly how a stock will react.

To predict earnings, Wall Street analysts use several techniques:

1. Most analysts start with an in-depth financial model in Microsoft Excel. This model will usually contain every line item of a company's financial statements over the past five to ten years.

2. An analyst will develop his or her own views of how things will look in the future through a combination of extrapolating past trends, looking at how similar companies have been doing, and talking extensively with company management in order to gain an edge in understanding the business.

3. To refine these models, the analyst will likely conduct "channel checks" by calling on distributors of a company's products to see how well they are selling, and talking to competitors to gauge how the pricing in an industry is holding up.

Some observers have cautioned that this kind of high-stakes earnings-game investing makes it very tempting to use inside information. It is illegal in the United States to trade stocks based on non-public knowledge of a company's earnings (this would include things like being tipped off by a member of the management team before a company announces). In the past couple years, several high-profile hedge funds have run afoul of these regulations and gotten into trouble with the Securities and Exchange Commission (SEC).

Advice for the individual investor - use the earnings game to your advantage

> *It is generally difficult for the individual investor to successfully compete in the earnings prediction game. Wall Street analysts have too many informational advantages. One key to successful stock-picking at the individual level is to compete indirectly with Wall Street. In other words, do not try to beat them at their own game, but instead be strategic and take advantage of their weaknesses. For instance, if you have a positive long-term view of a company and are looking to get into the stock for the long-term, you may want to use a temporary fall in the price of the shares after an earnings miss as an opportunity to buy in at a low price. Just make sure that nothing in the earnings announcement has changed your favorable long-term view.*

Momentum

Another class of investors are not particularly concerned with either intrinsic value or earnings, but instead are focused purely on the stock price and which direction it is heading in.

Momentum-driven investors are frequently looked down upon by fundamental analysts, who see them as "dumb" money. But as we saw in the last chapter, there is pretty strong evidence that buying past winners and selling past losers has been a profitable strategy over the long term. There are a few fundamental reasons stock prices might not be totally random, but instead tend to "trend" at important times:

- It can take a long time for large institutional investors like mutual funds and pension funds to enter into positions in a stock. This is because they are managing so much money that they need to space out the time period in which they buy a new stock in order to not flood the market with "buy" orders and make the price go up.
- Professional investors tend to "herd" together for various reasons (either they are directly sharing ideas, or it is just the professionally safe path to take since if the stock you buy goes down at least you can claim that plenty of other people made the same mistake). Once one big fund accumulates a position, pushing the price up in the process, others will likely follow.
- New information may not be instantaneously incorporated into the stock price. If, for instance, a company's new products are selling far better than anyone expected, it might be likely for different analysts to figure this out at different times. This can create sustained buying pressure on a stock.
- Somebody may have non-public information. The first buyers in a trend may be analysts with inside information, or company insiders that know something is up. These first buyers cause the stock price to go up initially. Once the news travels, the price continues to go up until the information is completely reflected.
- Once a stock has gone up a lot (for any reason), momentum investors will flood in and purchase its shares, pushing it up even more. In this sense, momentum can be a *self-fulfilling phenomenon* (the mere fact that a lot of people *think* it exists actually *makes* it exist).

It is important to note that these factors fall into two categories: some are *fundamental* factors related to the transmission of information. Others are

technical factors related only to the short-term supply and demand for shares of a company's stock. Often, both of these factors might be involved. A stock's momentum run could start on the back of fundamental factors such as a pick-up in the company's business that the market does not instantaneously recognize, but then continue after favorable news has already been fully priced in because of technical factors.

Advice for the individual investor - be careful when "fighting the tape"

Long time stock traders like to say that it is never a good idea to "fight the tape." In other words, if the market seems intent on sending the price of a company's shares down, it is not a good idea to go against the grain and buy them. This may generally be sage advice, but it is confusing to many, as it goes against the "buy low sell high" value investing ethos favored by famous investors like Warren Buffett.

A more nuanced view would be "don't fight the tape unless you have a good reason." There is usually a reason why stock prices react the way they do. If you believe that reason has now become obvious and that the market has moved past the "fundamental" momentum stage and into the "technical" one, then buying a stock that has gotten beaten down to below its fair value can be a very profitable strategy. But make sure that you really understand the business and have a good reason for thinking that it will be worth more in the long-term than it is priced at today. This is why Buffett only owns a small and concentrated portfolio of companies with relatively simple businesses that he can understand.

"Fighting the tape" can be really dangerous because there is always a strong chance that somebody that is selling knows something that you do not. They might even be aware of non-public information. For most individual investors that do not have the time to really understand a business in as much detail as professional investors like Warren Buffett, it is probably better to wait for a stock price to stabilize for a couple months before rushing in and buying (i.e. look for a chart that has flattened out and is no longer falling).

On the other hand, buying stocks that have already gone up in price can be difficult since it feels like you may have already "missed out on the party." But this can actually be a profitable strategy over the long term. A key in investing in these kinds of momentum stocks is to get out (sell) once it seems like the positive business news has been more than priced in, and the only buyers remaining are momentum chasers. Evidence of this might be if the P/E ratio of the stock has reached unjustifiable levels and the stock is frequently mentioned in the financial news. Stocks that are relying on technical momentum factors can break and fall sharply for little reason, since even a small fall will cause the whole momentum crowd to bail out of their positions en masse. Netflix (NFLX) is a great example of this in recent times.

Further Reading

- How to Make Money In Stocks is widely considered the "Bible" of momentum investing. It is written by Bill O'Neill, who also runs Investor's Business Daily, a popular financial newspaper. Both the book and newspaper are well worth reading to understand and maybe even profit from the momentum and expectations games.
- The NY Times magazine was a worth-reading piece on the SEC's crackdown on insider trading.
- For more on the importance of not "fighting the tape" and other pearls of wisdom, Market Wizards: Interviews with Top Traders is a can't miss classic.

Chapter 9: Putting it all together - How to Build a Game Plan for Successful Stock-Picking

This chapter will culminate our look at stock-picking by highlighting the best practices that individual investors can use to beat Wall Street. It will conclude by looking at Netflix (NFLX) as a case study on good individual investing. Skip this - jump to Appendix.

Use what you know, avoid pitfalls

Being a successful stock-picker may be as much about having a good strategy as it is about doing great research or having great insight. Individuals should understand that they are not Wall Street analysts. This has three huge advantages that should be exploited, and one big disadvantage which should be minimized.

Advantages for Individual Investors that should be leveraged

1. **Longer time horizon**. Whereas mutual funds are constantly judged on a quarterly basis and may face pressure to "follow the herd," individual investors can invest for the long term. Individual investors can take advantage of this by purchasing "boring" companies that are selling for relatively low valuations, and waiting for a news catalyst to come along and force them to move up. If you want to take this kind of strategy, one approach is to screen for companies that have lower P/E, P/B, and FCF yields than the overall stock market, an ROE that is consistently above 15%, and a performance over the past year that is near or above the level of the overall market. Avoid high-growth "story stocks" that are already selling at absurd valuations - these are likely to be "follow the herd" stories that end badly. Finally, make sure the balance sheet is healthy before you buy.

2. **Feasible to invest in small-caps.** Huge mutual funds with billions of dollars to invest have trouble investing in small companies due to ownership limitations and trading practicalities. For instance imagine a $4 billion mutual fund wants to invest 1% of its assets in a company in order to build a somewhat meaningful position. That means $40 mil is the smallest position size it could take in a company. Mutual funds are generally not allowed to own more than 10% of the outstanding shares of a company, so already this is limiting the universe to $400 mil market caps and above. Even at this level, buying up 10% of all the outstanding shares is time consuming and likely to push the price up a lot in the process. Individual investors can exploit this weakness by purchasing shares in companies with a market capitalization of under $1 billion. Of course - be careful to do your homework first, just because a company is small does not mean that its share price is going to go up. If you are interested in taking this kind of approach, it is advantageous to either do really thorough research of your own, or to own a diversified portfolio of twenty or more small stocks - so that if a single purchase "blows up" it will not destroy the performance of your overall portfolio.

3. **Better insight on "main street" trends**. A third advantage that is too frequently ignored is that individual investors may actually know some companies and trends better than the Wall Street analysts that cover them. Wall Street can sometimes be out of touch with "main street" trends (how many friends of millionaire portfolio managers do you think eat at Chipotle, shop at Wal-Mart, etc.). Individual investors can leverage this to their advantage by investing in companies that they know and love. Keep an eye out for new trends. Buy companies that you know and like and that seem to be catching with your friends (of course, make sure not to pay too much for them by checking various valuation ratios).

Disadvantage for individual investors that should be minimized

The major disadvantage to being an individual investor is that you do not have as much time to thoroughly research companies, and you do not have the access to company management and other resources that the big players do. This disadvantage can be minimized by paying attention to the age-old trader's adage: "don't fight the tape." Unless you really know a company, understand what is causing the stock price to fall, and have a confident long-term view, it is generally better to buy a stock that is flat or on its way up than one that is falling in price. Large institutional investors that catch on to a fundamental development will affect the price when they try to move into or out of a position - thereby telegraphing that they have changed their view.

Follow these four rules - Pay attention to valuation, look at smaller stocks, invest in companies you understand, and don't fight the tape - and you will likely have a good chance of beating Wall Street at its own game.

Netflix (NFLX) as a case study

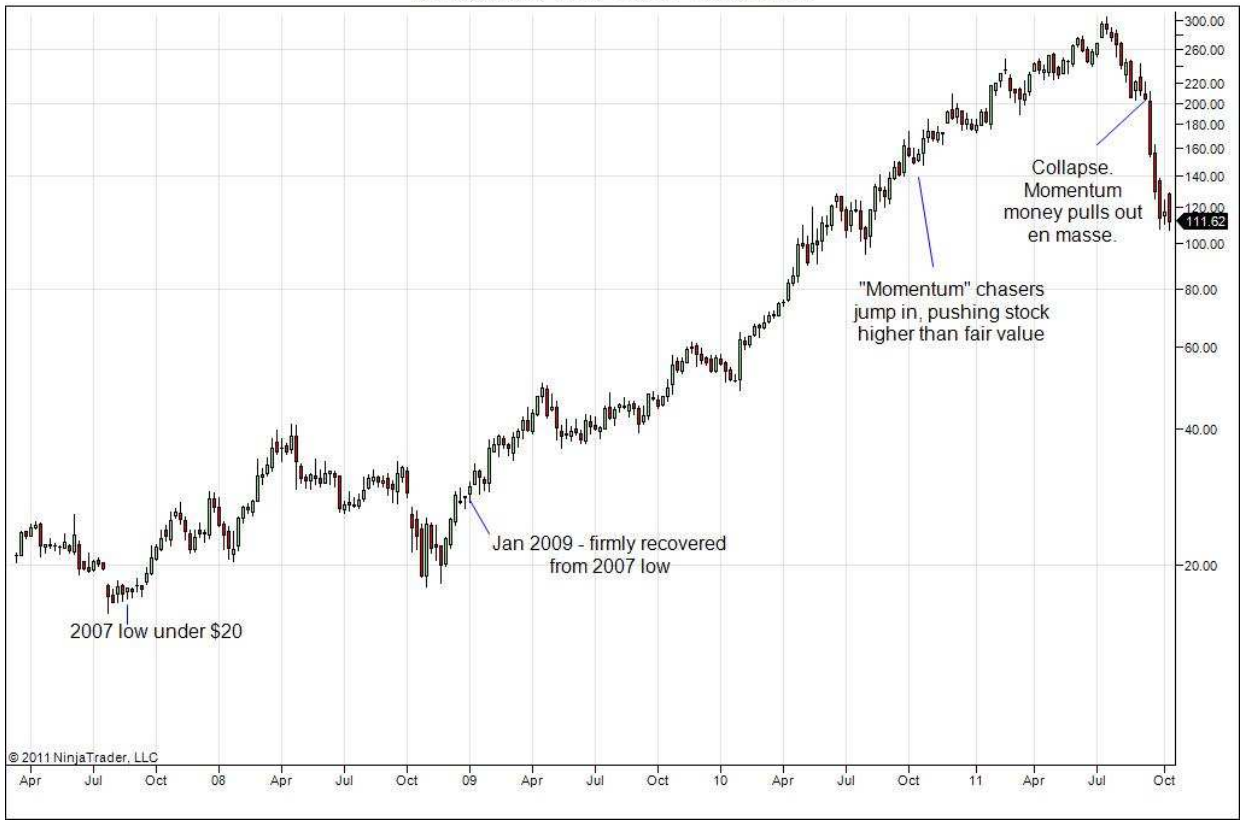
You might remember Netflix was mentioned in the last chapter. It is a wonderfully instructive stock for a number of reasons. Millions of Americans were happy users of the service back in 2007, 2008 and 2009 when the shares were trading at between $20 and $40. These individuals had all the data they needed to make a stock purchase that would go up over 10x over the next few years. They knew that they were happy users of the service, they knew that their friends were happy users of the service, and they knew that the service had the chance to really spread virally. Moreover, the stock price did not seem to already incorporate this information.

A look at the 2008 Netflix annual report shows net income of $83 million and 9.39 million subscribers on revenue of $1.3 bil, while the market

capitalization at the time was above $1.5 billion on a $30 share price. Thus NFLX was trading at around a 18 P/E multiple and 1.1 P/S multiple on last year's sales. Neither of these seem extraordinarily high for a company with extremely positive fundamentals and the possibility of exponential growth into the future. Earnings growth had been strong even in a very weak economy - earnings grew by over 20% in 2008 and were expected to continue to grow at a double-digit clip, putting the PEG ratio below 1. NFLX's streaming service seemed to be taking off, so it was easy to see the subscriber base doubling or tripling in the next few years as more people found out about the convenience of this service. Moreover, the stock had started to recover impressively from its 2008 lows, so there was strong evidence that Wall Street investors were beginning to get interested in this story. In short, all the necessary ingredients for an individual investor to purchase NFLX shares in early 2009 for a price between $25 and $40 a share were there.

Over the next few years, this investment would go up more than 7 times in price to a high of $300 a share. Of course, at some point this story became less about the fundamentals and more about the momentum. NFLX was mentioned seemingly every day by the financial sites, the P/E went from under 20 to more than 80 at its peak (even though earnings doubled in two years), and the stock was increasingly supported by momentum purchasers. So in 2011 when NFLX announced that it was raising prices in order to pass along increased content costs, there was a rush of momentum money out the door and the stock was dramatically cut from around $300 a share to $110. Whether it is a good buy or not today depends on your view of the streaming industry going forward. But at a purchase at around $30 in 2009, NFLX would have paid off very handsomely in either case.

NFLX (Weekly) Week 11/2007 - Week 41/2011



Further Reading

- One Up on Wall Street by former Fidelity stock-picking star Peter Lynch provides sound advice on using what you know to beat the stock market.
- Yahoo Finance is a great source of everyday financial information.

Afterward

Thanks for reading Investing in the Stock Market: A Briefing. We hope that you have found this to be an efficient way of getting credible information that you can trust. If you liked this guide, please consider one of the following.

1. Leave us a review on Amazon.
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5. Buy one our other Amazon books from our Amazon page. A Beginner's Guide to Investing is a great companion to this book that succinctly explains the best practices to invest for retirement.

Appendix 1 - Questions to ask in analyzing a business

Business

- How does the company make money?

- Does this seem like it should be a good business? Is it competitive? Do suppliers have too much power? Do customers value the product? Are there substitutes?

- Without looking at financials, how does the company seem like it has done versus competitors in its industry in terms of executing on its vision?

- What reputation does the management team have? Do they seem honest? Straightforward?

Valuation

- What is the company's P/E multiple? Is this high or low for its industry? For the overall market right now? Why might the stock be trading at this valuation?

- What is the company's free-cash flow yield. Is this a relevant metric given the stage that it is in? How does this compare to similar companies?

- Is the company growing faster or slower than other companies with similar multiples?

- Based on the number alone, does the company seem to have a rich valuation or a cheap valuation? Why might this be the case?

Financials

- What has been the trajectory of revenue growth over the past ten years? Why? What is it expected to do in the future?

- How has the company's industry been growing? Is the company gaining or losing share versus its industry?

- What is the level of the company's profit margins? How does this compare to other companies in its industry?

- How have margins varied over the past ten years? Why?

- What percentage of the company's costs are fixed costs versus variable costs?

- What is the company's historical return on capital? Why is it high/low? What does this say about the quality of the business?

- What is the trend in returns on capital? Why? What does this say about the returns that the company will have to make on its future investments?

- What is the company's dividend policy? Why? If they are paying no dividend or a small dividend, is there a danger the company's management will waste shareholder's money?

Technical

- How have the company's shares performed versus the overall market and its industry over the past twelve months?

- What seems to be driving this under/over performance?

- What key news events are likely to impact the stock in the future?

- Do mutual funds and other large institutional investors seem to be buying or selling the shares?

Sentiment and Expectations

- What are the consensus earnings estimates for the next quarter and year? Do these seem aggressive or conservative?

- Does consensus opinion seem overly bullish about the company's future prospects or overly bearish?

- What insight do you have that the market might be missing that will cause the shares to appreciate?

Notes

[i] This may understate the degree of expected equity returns if companies dividends are lower than they could be because they are electing to use cash to repurchase shares of their stock. This would translate, over time, into higher dividend growth per share since it reduces the number of shares outstanding. On the other hand, in some cases these repurchases merely offset the impact of stock option grants to employees.

[ii] See Standard and Poor's 2010 SPIVA report.

[iii] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Research

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

R Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2010

or

£ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number 1-3950

Ford Motor Company
(Exact name of Registrant as specified in its charter)

Delaware	**38-0549190**
(State of incorporation)	*(I.R.S. employer identification no.)*
One American Road, Dearborn, Michigan	**48126**
(Address of principal executive offices)	*(Zip code)*

313-322-3000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

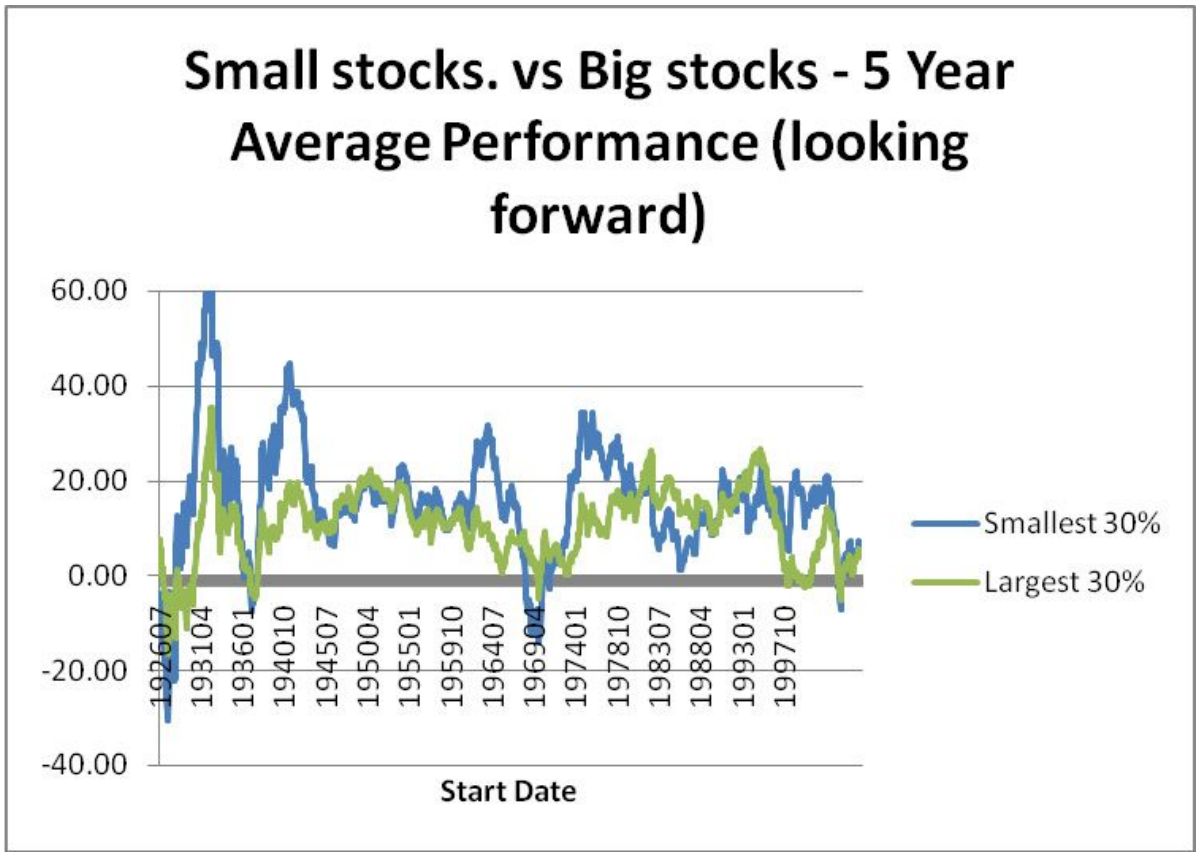
Title of each class	**Name of each exchange on which regi**
Common Stock, par value $.01 per share	New York Stock Exchange
7.50% Notes Due June 10, 2043	New York Stock Exchange
Ford Motor Company Capital Trust II 6.50% Cumulative Convertible Trust Preferred Securities, liquidation preference $50 per share	New York Stock Exchange

* In addition, shares of Common Stock of Ford are listed on certain stock exchanges in Europe.

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes R No £

Indicate by check mark if the registrant is not required to file reports pursuant to section 13 or Section 15(d) of the Act.


Small stocks. vs Big stocks - 5 Year Average Performance (looking forward)
60.00
40.00
20.00
0.00
-20.00
-40.00
192607
193104
193601
194010
194507
195004
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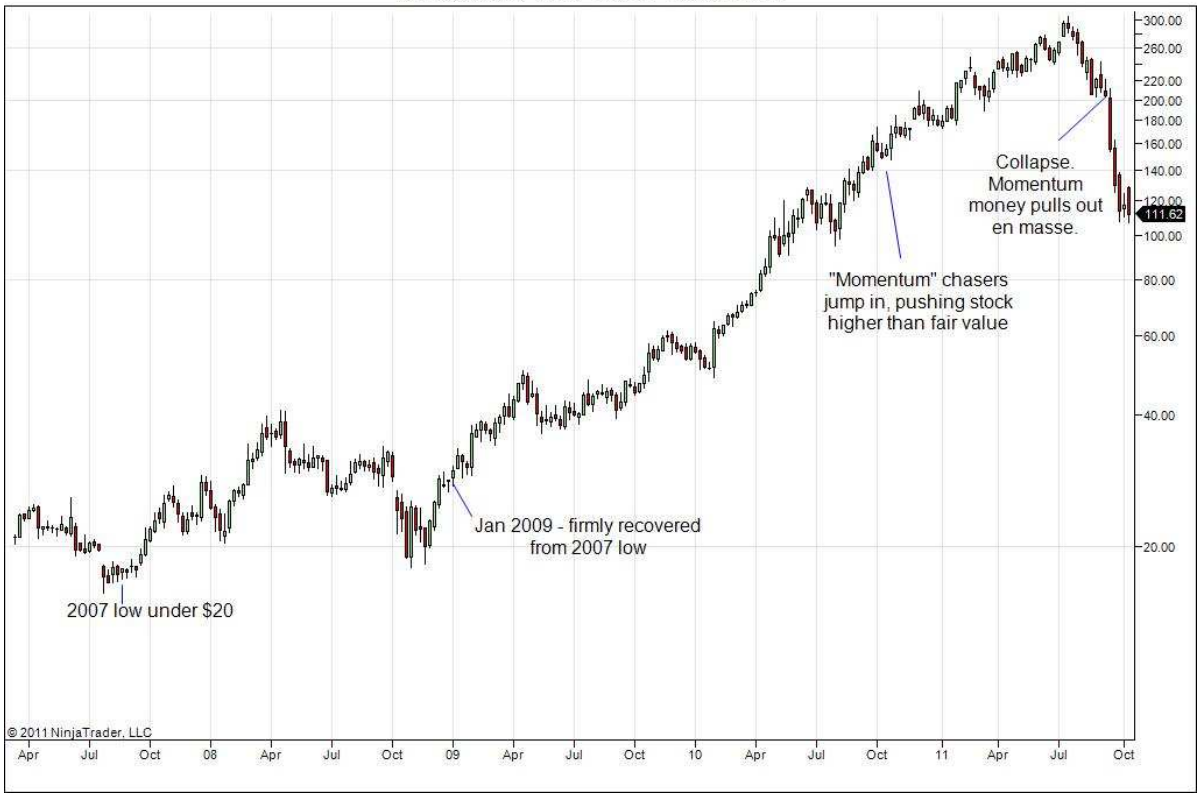
195910
196407
196904
197401
197810
198307
198804
199301
199710
Start Date
Smallest 30%
Largest 30%

NFLX (Weekly) Week 11/2007 - Week 41/2011



Bids (Buy orders)	Asks (Sell Orders)
$19.99 x 300	$20.01 x 100
$19.97 x 1000	$20.03 x 500
$19.95 x 200	$20.05 x 1000
$19.90 x 300	$20.07 x 400

Table - The different types of profits

Revenues	Receipts from sales to customer
- Cost of Goods Sold	Subtracts out the direct cost of buying/making products
= *Gross Profit*	
- Selling, General, and Administrative Costs	Subtracts out the cost of selling products, and other administrative costs of running the company
= *Operating Profit*	
- Interest Expense	The charge the company has to pay to borrow money
=*Net Pre-tax Profit*	
- Taxes	
= *Net Profit*	
+ Non-cash charges	Adjusts for differences between accrual accounting and cash accounting
Operating Cash Flow	
- Capital Expenditures	Subtracts out money the company is using to invest in its own operations (expand factories, etc.)
= *Free Cash Flow*	

Assets	Liabilities
$5k cash	$10k Debt
$20k factory	

	Price to Earnings (P/E)	**Price to Sales (P/S)**	**Price to Book (P/B)**	**Dividend Yield**	**Free-cash flow yield (FCF)**
Calculation	Share Price / Earnings Per Share (EPS)	Total Market Cap / Total Net Revenues	Total market Cap / Book Value (Assets - Liabilities)	Dividends per share / Total Market Cap	Free Cash Flow (CFO - Capex) / Market Capitalization
Good for	Great first-take on a normal company with positive earnings	Companies with negative earnings, start-up companies, comparing companies w/ similar businesses	Companies with "real" assets, cyclical companies, manufacturing companies	Dividend-paying companies, Mature companies	Mature Companies, slow-growers
Not Good for	May not be meaningful for companies with negative earnings, companies going through restructuring, or companies that are highly cyclical (earnings fluctuate widely from year to year)	Comparing companies w/ different business models	Companies with mostly intangible assets like brands, technology, etc.	High growth companies that are re-investing in the business. Companies that have chosen to distribute money by repurchasing shares of their common stock	High growth companies that are re-investing in the business