PART I

INVESTMENT 101

AN INTRODUCTION TO THE ENDOWMENT PHILOSOPHY OF INVESTING

Before we talk about how individuals can invest like endowments, in Part I we need to discuss the current financial environment and its implications for investors (see Chapter 1). In Chapter 2 we will explore why investors make the mistakes they do and how they can avoid them. Chapter 3 will then start to lay the groundwork for thinking about your portfolio the same way endowments do. In Chapter 4 we will discuss the two types of money managers that endowments use. In Chapter 5 we will introduce you to the endowment portfolio theory, and in Chapter 6 we will show you how endowments outperform the market.

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CHAPTER 1

The Current Environment and the Need for New Thinking

As I write this chapter 2008 is almost over—good riddance! This year was a game changer for the investment industry as the three main pillars of investing—buy and hold, traditional asset allocation, and indexing—are either broken or teetering. For years, investors have been told to buy and hold solid stocks, companies like Bear Stearns, Lehman Brothers, Fannie Mae, Freddie Mac, Wachovia, GM, etc., might go down but they will never go bankrupt. Because of what happened in 2008 we can never say that again. Traditional asset allocation says that investors should put some money in small stocks, medium-sized stocks, large stocks, and bonds, that way they will have some protection if one area is going down, hopefully another will be going up. In 2008 there were no safe havens, just about everything went down. A diversified portfolio may have provided some protection, but you still would have been down a huge amount. Index fund advocates argue that most active money managers don't beat their index so investors should just buy index funds. During the lows of November 2008 an investor who bought an index fund 10 years ago would have had a negative 10-year return. I used to tell people that I don't know where the market is going to go but since we have only had two negative 10-year year periods in the market since the depression, it should be up in 10 years. I can no longer say that.

What happened?

We all probably remember the 2000–2002 market crash, but since then things were fine in the markets, until the summer of

2007. It all started with signs that there were problems in mortgages made to people with less than stellar credit ratings, the so-called subprime mortgages. Since this was only a small part of the mortgage market, most people thought it would blow over without much carryover to other areas. They were wrong. When a couple of Bear Stearns hedge funds that had been invested in subprime went belly-up, people started to get worried. The Fed, as it always seems to do, came to the rescue and lowered interest rates. This caused a strong rally in the stock market, until October 9, 2007. Since then, and as of this writing, the market is down nearly 20%; Bear Stearns and Lehman Brothers are bankrupt; Fannie Mae, Freddie Mac, and AIG had to be bailed out by the government; and Washington Mutual failed. What happened and is this a small blip or the continuation of something much larger?

What people learned after October 9th is that the subprime mess was much worse than expected. Mortgage companies had gone crazy giving loans to anyone with a pulse and many times with no money down. Real estate investors saw home prices increasing with no end in sight and leveraged up. Financial magazines were full of articles about how people were making tons of money flipping properties, buying them with a subprime mortgage and no money down, and then selling them shortly after for a profit. In the meantime, the banks making these mortgages sold them to Wall Street firms who packaged them into bonds to sell to institutional investors. Somehow, the Wall Street firms got the credit rating agencies to give the bonds high credit ratings (meaning a low chance of default). The combination of high ratings and higher interest rates meant that there was no shortage of buyers. Many Wall Street firms and other investors leveraged up by borrowing money short term and buying tons of this packaged subprime debt. Things were going great until the bottom fell out.

Housing prices couldn't go up forever, and they didn't. They started going down, which put tremendous pressure on subprime debt as more and more people had negative equity on homes and investment properties. It also turned out that making no money down loans to people who had no real way of paying them back probably wasn't the best idea (go figure). Once these cracks started to show, it created a ripple effect. Firms that had borrowed money to buy subprime loans started seeing the value of the debt going down. This caused the banks, many of which were the investors in

this stuff, to start calling in loans. With the loans being called, the investors had to sell stuff to pay them back, but there were no takers for subprime debt. So instead of selling the debt, they either went under or started selling what could be sold, things like high-quality stocks. This caused the stock market to go down as many long/short hedge funds were short low-quality stocks and long the same high-quality stocks that people were selling like crazy. These funds were also leveraged, and they were forced to buy back the low-quality stocks and sell the high-quality stocks, making things worse. It turned out that most of the people who ran these long/short hedge funds either used to work for Goldman Sachs or used the same quantitative screens that Goldman Sachs uses. That meant that everyone was long the same stocks and short the same stocks; when one fund got into trouble, every fund got into trouble. Also, most of the banks and brokerage firms were invested up to their ears in subprime debt and they were hurting. This finally resulted in the collapse of Bear Stearns in 2008.

While all this was going on, oil prices started going through the roof. This is never good for the economy as we need oil to drive our cars, and most industries need oil to run their factories and transport their goods. This hurt the consumer and caused prices to go up for just about everything. To counter the subprime mess, the Fed started lowering interest rates, which is their primary policy tool for combating a slowing economy. However, lower interest rates hurt the value of the dollar because global money flows to the countries that have the highest interest rates. Since oil is denominated in dollars, this caused oil prices to go up even more. Then, just when we thought we understood the crisis and thought it couldn't get worse, it did. Commodities, which had been rising, fell through the floor. Since commodities were the only asset class that was doing well, the hedge funds had bought into them heavily, this caused many hedge funds to go under, further roiling the stock market. October and November were horrendous months for the market. It was this final nail in the coffin that really impacted the large college endowments and caused them to suffer large losses.

Bernie Madoff

Just when we thought it couldn't get worse, we got the Bernie Madoff scandal, the largest Ponzi Scheme in history. Mr. Madoff

managed $17 billion dollars (or so people thought) and was able to generate consistent returns year after year. In actuality he was using money from new investors to pay returns to old investors, the classic Ponzi Scheme. While Mr. Madoff's fund was not a hedge fund, hedge fund of funds invested heavily into his company. In this book I talk about hedge funds and hedge fund of funds and recommend them for some investors. While the Bernie Madoff scandal and all of the hedge fund bankruptcies don't render this strategy invalid, they do increase the need for proper due diligence. There are some helpful lessons to be learned from what Madoff did. While there were many red flags that sophisticated investors should have picked up on, there were some things that should have given individual investors pause as well. For example, my firm manages money. If I want to buy a stock in a client's account, I call Fidelity Investments who buys the stock and puts it in the client's own account held at Fidelity. Fidelity then sends the client a confirmation that the stock was bought and at the end of the month,, the client gets a confirmation from Fidelity showing how much their account is worth and what is in it. If Bernie Madoff wanted to buy a stock in a client's account he called Bernie Madoff to place the trade. Bernie Madoff would place the trade in the client's account which was held with Bernie Madoff. Bernie Madoff would send the client a confirmation of the trade and at the end of the month the client would get a statement from Bernie Madoff showing the value of his account. If it looks like there are too many Madoffs in this equation, you are correct. There was no independent third party to raise a red flag. Hedge funds and fund of funds are still valid investments, like any type of investment, there are good and bad. If you don't have the level of sophistication to tell one from the other, or don't have an advisor you trust to help you, then stay away.

The Consequences of Our Actions

The question now becomes is what happened in 2007 and 2008 just an isolated incident that will correct itself, and will it then be back to business as usual? Or, is this the continuation of things that have been happening over time that will fundamentally change our markets? Unfortunately, I would argue for the latter. Now I know what you might be thinking. You have heard before how things have changed only to see them eventually go back to normal. During the technology

bubble of the late 1990s, you heard how companies didn't have to make money anymore and how Internet firms that had no prospects of making money anytime soon could be worth more than well-established companies. A few years ago, a Greenwich, Connecticut, real estate broker told me that Greenwich real estate would never come down because of the great schools, low taxes, and proximity to New York City. You've heard it before, but this feels different.

For years we have been living with a global imbalance:

- U.S. consumers purchase goods made in Asia and gas from the Middle East.
- U.S. consumers overextend to purchase these things using credit cards and home equity loans.
- These loans are repackaged by Wall Street as bonds and sold to the same Asian and Middle Eastern countries so that they can invest the proceeds from their sales to U.S. consumers.

This all worked great as we sent money overseas, and it came right back to stabilize our markets. However, this is having, and will continue to have, a number of important consequences on world markets:

1. *Inflation.* For years, inflation has been kept in check partly by cheap labor in emerging markets. However, as more and more money flows in, it is creating a new middle class. As the middle class develops, they will want higher wages. Wages will then increase, causing prices of goods made in China and other countries to increase.
2. *Demand for Commodities.* As these economies grow, so will demand for oil and other commodities, further pushing up prices.
3. *Infrastructure.* As these economies grow, they will increasingly need to build modern cities and other infrastructure projects.
4. *Internal Consumption.* As the middle class grows, they will want the same types of goods and services that the U.S. middle class wants. This will cause these economies to shift from primarily export based to more of an import focus. This will result in a decoupling of these economies from the developed economies. For years, when the United States sneezed,

> the emerging markets caught a cold, because our demand for their exports went down. As these economies start to shift and they rely less and less on exports, their economies will decouple from ours.

In the past, emerging market countries would invest their surplus funds in U.S. bonds, primarily Treasuries. This would keep the dollar strong and keep our interest rates low. (This is purely supply and demand: If there is a strong demand for dollars to buy Treasury bonds, the price of each will go up; in the case of Treasury bonds, a higher price means a lower interest rate.) Now, as these countries become more sophisticated, they are setting up sovereign wealth funds (SWFs), many of which are implementing endowment types of investment strategies themselves. These SWFs can have a tremendous impact on financial markets going forward and will most likely result in less money invested in Treasury bonds (increasing our interest rates) and dollar-denominated assets (decreasing the value of the dollar).

The bottom line is that we can no longer rely on emerging markets to prop up our economy by reinvesting the money they get from us into our bonds and our currency. We also can no longer rely on cheap labor in emerging market countries to keep labor costs and inflation down. We also need to assume that demand from emerging market countries will continue to push up the prices of commodities. Finally, SWFs and where they invest their money will have a huge impact on investment markets.

The result could be a lot like the phenomenon we saw in the 1970s when we had lower economic growth and higher prices. With the Fed in a bind, this is happening right now. This is commonly referred to as *stagflation.*

How to Make Money Whether in a Bear or Bull Market

Most market prognosticators, me included, are predicting that we are in for a period of mediocre returns. Others might argue that the markets are just being irrational. The famed economist John Maynard Keynes once said, “Markets can remain irrational longer than you can remain solvent.” Bear Stearns and a number of hedge funds would probably agree with this statement.

Table 1.1 shows the major bull markets we have had throughout history ending with the bursting of the technology bubble in 2000. A bull market, or upward-trending market, occurs when each successive high point is higher than the previous one.

Table 1.2 shows all the bear markets we have had including this current period. A bear market, or downward-trending market, occurs when a trend does not rise above the previous high. History has shown us that bear markets tend to last for quite some time. If we are in a bear market, and history holds true, then we have a few more years of mediocre or negative returns to go.

The current and perhaps future investment environment begs for new solutions. The large endowments have shown the ability to make money no matter what the market does, while they stumbled in 2008 this does not invalidate their strategy. Individual investors need to learn how to do the same thing. It always amazes me how people panic when the stock market goes down or oil goes up. No matter what is going on in the stock market, there are ways to make money; you just need to think outside the box. The investment

Table 1.1 Bull Markets

Start	End	Months	Years	Annualized Return	Cumulative Return	Annualized Std. Dev.
12/18/96	1/19/06	110	9	10.56%	148.92%	20.45%
7/19/24	8/19/29	63	5	30.44%	294.66%	17.30%
12/19/54	1/19/66	135	11	8.72%	154.29%	11.68%
11/19/82	1/20/00	206	17	15.09%	1003.19%	15.12%

Source: Tuttle Wealth Management, LLC.

Table 1.2 Bear Markets

Start	End	Months	Years	Annualized Return	Cumulative Return	Annualized Std. Dev.
2/19/06	6/19/24	218	18	−0.24%	−4.29%	18.71%
9/19/29	11/19/54	304	25	0.07%	1.69%	24.96%
2/19/66	10/19/82	202	17	0.05%	0.83%	15.25%
2/20/00	12/20/07	96	8	2.46%	21.24%	13.78%

Source: Tuttle Wealth Management, LLC.

world is not blind to what is going on. They are coming out with new products every day to meet the demand for investments that will go up regardless of what our market does. Individual investors need to understand these new products and how they may or may not fit into their portfolios.

During the late 1990s, anyone throwing a dart at a board could make 30% per year. I used to have people from all industries tell me how they felt bad for me as an investment advisor. Who needed an advisor when the market went up with no advice needed? Today things are different. What used to work no longer does. Eventually we will have another great bull market but who knows when that will be. Will you still be around when it comes; will you still be solvent?

The Old Way

The old way that many individual investors allocated their money was based on a misinterpretation of modern portfolio theory. (We will talk more about how to correctly use it later.) The traditional asset allocation approach involves the following seven step:

1. *Gather the asset classes you will use.* Most investors use large-cap growth, large-cap value, mid-cap growth, mid-cap value, small-cap growth, small-cap value, international, and fixed income.
2. *Forecast returns for each of those asset classes.* Most people take the easy way out and use past performance.
3. *Forecast how correlated they will be to each other.* Most people use past correlation.
4. *Forecast how volatile they will be.* Most people use past volatility.
5. *Create a portfolio based on all your forecasts that will provide the best possible risk-adjusted return.* You would use software called an optimizer to figure this out.
6. *Hire money managers.* They should be style pure (stick to their style, like large-cap value or small-cap growth, and never deviate).
7. *Monitor your managers.* Make sure they don't deviate from their style.

On the surface this approach seems valid. For every level of risk there is one mix of assets that would provide you with the best return. Let's say we rank risk from 1 to 10, with 1 being risk free

and 10 being extremely risky. You decide that you are a risk level 5. Let's say at risk level 5 there are two possible portfolios: one that we expect to be up 10% and the other we expect to be up 15%. Which would you choose? This is not a trick question. If each portfolio has the same risk, naturally you would take the one that has an expected return of 15%.

This approach has a number of problems, however. First, the asset classes are too narrow and as I will show you later in the book, they are highly correlated, giving you very little diversification benefit. Second, you cannot forecast returns, correlations, and volatility with any real accuracy. If you can, you should not waste your time reading this book. If you know exactly what each asset class is going to do in the future, you can make a killing. I can easily tell you what portfolio would have done the best in the past but my crystal ball doesn't work well enough to tell you what mix will be the best in the future. The best I can do is make an educated guess. Third, if you can't accurately forecast, then your results are suspect. Also, any good optimizer will have constraints. (You don't have to buy or create your own optimizer; if you work with an investment advisor, he or she probably has one or you can find them online.) If the optimizer didn't have constraints, you would find that your results wouldn't make much sense.

In business school we had to create our own optimizers, and the results we got usually didn't make much sense. Our optimizer would fall in love with some asset class that we projected would have low correlation to the others and high returns. We would get optimal portfolios that would look something like 40% high-yield bonds, 20% emerging market stocks, 20% cash, and 20% small-cap value stocks. Maybe this portfolio would turn out to be efficient, but it would be pretty hard to recommend it with a straight face to a client. To fix this we had to put constraints on our output. So we had to limit a number of asset classes. The combination of flawed forecasts and constraints meant that our eventual output was of little value. Don't get me wrong: Optimization is still a fine approach. It's also much better than how most investors invest. The large endowments forecast returns, volatility, and correlation of the asset classes they use and they use optimizers. The main difference is that they don't solely use past returns to forecast future returns. They realize that optimization is part art and part science so they don't blindly follow the optimizer. They also use a number of asset classes that

people usually don't use that truly are not correlated to each other. The broader asset classes are really the key. When most people develop optimized portfolios, they are using assets that are either highly correlated or, even worse, become highly correlated when the markets decline.

The other problem with this approach is that the money managers have to stick to their style religiously. If they deviate, even if the results are good, then they get fired. So let's say your large-cap growth money manager decides that small-cap value stocks are cheap and starts buying them. Even if the trades are profitable, he would be fired under the traditional approach for deviating from his style. This is called *style drift* in the industry. Also, you might find a money manager who has generated great returns over the years but doesn't fit neatly into a style box. Using the traditional approach, you could not use this manager. I once had an interesting meeting with a mutual fund wholesaler. Wholesalers are people who work for mutual fund companies who get paid to convince people like me to buy their funds for my clients. His fund had an amazing track record, beat the market handily, and protected on the downside during the 2000–2002 crash. His problem was that the fund didn't fit neatly into a style box so that most of the advisors he spoke to couldn't use it—even though it handily beat any other fund they might be using.

Time for a Change

For years the large college endowments have been way ahead of individual investors and other institutions in their thinking. It's time that individual investors start to catch up and learn what endowments have known for years. That's what this book is all about. Before we get into what the endowments are doing, we need to talk about the mistakes most investors make that keeps them from having investment success.