The Art of Investing
Lessons from History’s Greatest Traders
Course Guidebook

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According to investing legend Warren Buffett, great investors are both born and made. Innate talent must be paired with hard work and honing investment skill to achieve truly outstanding results. One way to learn about investing is to study the backgrounds and strategies of some of history’s greatest investors. Sir Isaac Newton wrote, “If I have seen further, it is by standing on the shoulders of giants.” In this course, we’ll examine the backgrounds and investment strategies of more than two dozen of the greatest investors who ever lived. By standing on the shoulders of the giants of the investing world, we will, at minimum, become more educated investors.

Personal background or history is important not only because it is sometimes fascinating, but also because it often plays a key role in the development of an investor's philosophy. For example, Warren Buffett’s mentor, Benjamin Graham, lived through the Panic of 1907 as a young child and The Great Depression as an adult. These experiences led him to become a pioneer in value investing, an approach that involves buying investments at a steep discount. These experiences also helped him formulate a core part of value investing: margin of safety, or protection against downside risk.

John Templeton traveled the world as a young man and saw an expanded set of investment opportunities, a mindset perhaps best encapsulated by one of his most famous quotes, “If you search worldwide, you’ll find more and better bargains than by studying only one nation.” This vision led Templeton to pioneer the field of
international investing and helped make investing in foreign firms almost as easy as it is to buy shares in Apple. Buffett, Graham, Templeton, and the many other great investors covered in this course developed an investment strategy based on their backgrounds, skill sets, resources, and personality types that ultimately led each of them to find enormous investment success.

This course will also serve as an educational primer on many different fields of investing, including stocks, bonds, commodities, mutual funds, hedge funds, and private equity. We'll examine different techniques applied in each of these investment sectors. The topics of risk, return, and the different types of investments are of fundamental importance. But, the topic of investment is important far beyond the obvious notion of making money. To many, it is about freedom—financial freedom. The freedom to live the life you want to live. The freedom to help your family, friends, community, and perhaps ultimately society.

We’ll wrap up with a case study that touches on many of the concepts discussed in the course and develop an investment checklist designed to help you ask the right questions about your personal approach to investing and craft your own investment philosophy.
When asked if a great investor is born or made, Warren Buffett said he thought it was a little bit of both. He gave the example of Tiger Woods in his prime. He said Tiger Woods was born with an aptitude for golf, but that Tiger honed his craft by hitting 500 golf balls a day. Buffett and I both believe that investing is part art and part science. One way to learn about investing is to study the backgrounds and strategies of some of history’s greatest investors. Personal background or history is important because it often plays a role in the development of an investment philosophy.

Learning from Great Investors

> For example, Warren Buffett’s mentor, Benjamin Graham, lived through both the Panic of 1907 and the Great Depression. These experiences led him to pioneer the investment approach known as value investing, which refers to buying sound investments at bargain prices. He learned to formulate a strategy called a margin of safety, or protection against downside risk.

> From a macro perspective, the financial markets play an integral role in the world we live in by helping to raise money for growing firms.
Without financial markets, it would be almost impossible for a firm like Facebook to go from a startup run out of a dorm room to one valued at hundreds of billions of dollars in about a decade.

Similarly, Home Depot, which pioneered the superstore home improvement concept and is one of the largest retailers in the world, started with two leased stores. Through the financial markets, it raised the money that enabled the company to open more stores and develop its concept. Today, Home Depot operates thousands of stores around the world, resulting in annual sales of about $100 billion.

There's no single best way to become a successful investor, but many great investors follow several principles:

○ The great traders and investors in this course typically find a strategy that matches their skill set and personality type.

○ They work extremely hard and usually love what they do.

○ Nearly all of them continue to work well after the point at which they become rich.

○ They don’t give up when things go wrong, and they learn from their mistakes.

Principles and Strategies

> When you start investing your own money or have someone manage your money for you, you’ll have to ask yourself some tough questions. The first is whether you want to be an active investor, trying to outperform the market, or buy a handful of low-cost index funds and try to make money passively.

> Each approach has merit. Beating the market is tough, so buying and holding low-cost index funds that track the market as
whole—or special sectors, like health care or technology—makes sense for a lot of people.

> The next question is what kind of asset you’d like to concentrate on. One approach is value investing: trying to buy stocks at a discount to their intrinsic value. Benjamin Graham developed this field of securities analysis during the first part of the 20th century.

> Value stocks tend to sell at a discount to the market because of certain problems: A stock like Apple, for example, appeared to be on the verge of going out of business before Steve Jobs returned in 1997.

> Another popular approach to picking stocks is called growth investing. Growth-oriented investors are less concerned about buying an asset at a discount. Instead, they seek leaders in an industry—the next Amazon. This school of thought was developed in the 1950s by Philip Fisher and Thomas Rowe Price.
> Growth and value are the main distinctions in strategy among stock investors, but other approaches are also available.

> Before the Great Depression, publishing audited financial statements was optional for companies. Without hard data, most investors traded on rumors and hot tips or relied on a ticker-tape machine that produced a thin strip of paper with a stock’s symbol, its price, and perhaps the number of shares traded. Some investors were really good at “reading the tape,” or figuring out the trend in security prices. Today, this approach can be viewed as an early form of technical analysis.

> Technical investors look for patterns in price and volume, believing that certain trends can be anticipated and will repeat themselves. Most believe in a phenomenon known as trend trading or momentum investing. If the trend is up, you’d buy. If the trend is down, you’d sell.

> Another way to differentiate stocks is by their size—that is, the amount you’d have to pay if you were to buy the entire firm, not simply one share.

  ○ Large companies tend to be more established, have a longer history, and may pay a dividend.

  ○ Some companies generate more money than they can reinvest profitably. Giving a dividend to their shareholders is one way to use this excess cash.

  ○ Dividend-seeking investors include many value investors and others who live off the income.

> Some analysts focus instead on small-capitalization, or small-cap, companies. Small-cap companies are usually valued at $1 billion or less.
Small companies typically outperform large companies by about 2% or 3% a year over time. They also introduce about 50% more risk into your portfolio than their large counterparts.

Risk refers to the volatility of returns in your investment portfolio, a statistical measure known as standard deviation. Small-cap stocks are also more volatile, and information about them may be scarce.

The stock market gets most of our attention, but the bond market is much bigger. The bond market consists of government and corporate bonds as well as fixed-income securities tied to mortgages, student loans, and car loans.

Most great investors tend to own concentrated portfolios of between 10 and 30 stocks. They tend to believe you can’t follow many firms in detail because of limited time and attention. If they are correct in their analysis, this method might be the best way to maximize returns.

Other great investors favor a much more diversified approach. Successful quantitative investors run dozens, if not hundreds, of different investing models managed by quantitative analysts, or quants, who are the card counters of investing. They make many small bets with the odds in their favor, the results adding up over time.

Still other great investors use leverage, or borrowed money, as a key part of their investment strategy.

Patterns in Investing Strategies

We can also discern other patterns in investing strategies: For instance, most investors tend to be focused on investments in their home country. Academics call this the home-country bias.
Often, more information is readily available to us about our home country than about somewhere abroad.

But the British-American investor John Templeton believed that chances to earn attractive returns increase with broader investment opportunities.

> At times, you can be your own worst enemy. Sometimes investors chase hot investments and buy near a peak. Then, when these hot investments cool off, they sell near the bottom, the classic misstep of buying high and selling low.

> A whole school of thought on the tendency of investors to make such mistakes is called behavioral finance. One investor, in particular, who made pioneering contributions in the field is David Dreman, known as a contrarian investor. He’s willing to buy what is out of favor—like tobacco stocks, when they were being investigated by the government—knowing that the bad times affecting a particular stock or industry usually don’t last forever.

**Deeper Values**

> For many wealthy investors, transmitting values—the beliefs that generated their wealth, such as hard work, persistence, and integrity—is as important as passing on the value of their wealth.

> Many of the great investors featured in this course have signed The Giving Pledge, a program set up by Bill Gates and Warren Buffett, under which the wealthy pledge to give away at least half of their fortunes. Among the signatories featured in this course are Carl Icahn, Bill Ackman, and Ray Dalio.

> Warren Buffett, for instance, once purchased a farm for his son Howard but charged him market-rate rent. Buffett believes that just handing someone a big check is not a way to build character or achieve lasting happiness.
Financial freedom means different things to different people, and it doesn’t have to include becoming a billionaire. A more modest goal to which nearly everyone aspires is a comfortable retirement. Becoming a more competent and knowledgeable investor will most likely help you in that regard and may also give you a greater sense of control over your financial future.

During one of my meetings with Warren Buffett, he discussed the increase in the standard of living around the world, in part because of the role of the financial markets in providing capital to innovative firms that need it to grow. He said the average American today lives better than John D. Rockefeller, because we have better technology, better health care, and a host of other advances that were not available more than a hundred years ago. Investing and the financial markets are about the impact that successful investing and innovative firms can have on our lives—and on the world around us.

Increasing your knowledge about investments is a way to increase your control of financial matters. It means being guided by wisdom, not fear, when bad things happen in the markets and in the economy.

### Suggested Reading

Bodie, Kane, and Marcus, *Investments*.  

### Questions to Consider

1. Do you think investment success is mostly art or science?

2. What was your first investment and how has your approach changed over time?
Benjamin Graham is known as the father of value investing, and he pioneered a rigorous, quantitative approach to security analysis. Graham started investing during the early 1900s. The landscape then was very different. For example, investing was not considered a respectable profession. It was viewed more like astrology or a game of chance—run by crooks and people with inside information. Using inside information was legal at the time. His groundbreaking investment strategy had its roots in his own personal hardship.

The Graham Effect

- Investors before Graham used an early form of technical analysis, making investment decisions based on stock price and volume changes. Before the days of Bloomberg terminals and Yahoo Finance charts, the ticker tape listed that information, which was all that many investors had with which to make an investment decision.

- Back then many investors viewed stock as little more than a vehicle to speculate. One of Benjamin Graham’s seminal insights for securities analysis was in viewing stock as the ownership of a business.
The point is this: The difference between Graham’s strategies and some of the investment techniques used by his peers and predecessors is like the contrast between Babe Ruth and the home run hitters who came before him. It is not an exaggeration to say that Ben Graham changed the investing landscape forever.

Graham Mini-Biography

Benjamin Graham was born Benjamin Grossbaum in London in 1894. He moved with his family to New York when he was a year old. His father, Isaac, ran successful retail businesses selling high-end chinaware and figurines. The family led a comfortable life on Fifth Avenue in Manhattan.

When Graham was 9 years old, his father died, and the business quickly went downhill. Then his mother, Dorothy, was wiped out trading stocks during the Crash of 1907.

Graham was an excellent student and received a scholarship to Columbia University. After graduating second in his class in 1914, his Wall Street career began with the firm of Newburger, Henderson and Loeb. He quickly rose through the ranks and made partner at the age of 26.

He left Newburger in 1923 to set up his own firm with business partner Jerome Newman. The investment vehicles related to this business agreement became known as the Graham Newman Partnerships.

In 1928, he finally returned to Columbia to teach. His 1934 book, Security Analysis, which has since become known on Wall Street...
as the bible of value investing, was created in large part from the lecture notes of his classes.

Graham Investment Philosophy

> One of Graham’s principles was that if you had the money, you shouldn’t buy a share of stock in a company unless you would be willing to buy the company itself.

○ With that caveat, you would certainly be interested in the firm’s financials. Focus on the balance sheet, which lists assets on the left and liabilities and net worth on the right.

○ You probably would also want a business that had stood the test of time. For example, you might want to make sure it had survived a couple of recessions.

○ You probably would also like to buy the business at a discount to what you thought it was worth, just in case something went wrong or you miscalculated its value.

> Graham summarized these ideas into the concept margin of safety. He phrased it this way: “To have a true investment, there must be present a true margin of safety. And a true margin of safety is one that can be demonstrated by figures, by persuasive reasoning, and by reference to a body of actual experience.”

> Graham focused on quantitative measures of value. He first looked at the value of existing assets, such as cash, inventory, and property, by examining a target company’s financial statements. Next, Graham looked at current earnings. Lastly, and only in rare circumstances, he considered future profits, but only in the core competence area of a firm with a sustainable competitive advantage.
Mean Reversion

> The concept of mean reversion is a major underpinning of the value-investing philosophy. It means that past winners often become future losers, while past losers often become future winners.

> Graham was also early to recognize the role of market psychology in investing. Today, the field of investor psychology is known by academics and practitioners as behavioral finance.

> Value investments often occur because of market psychology, with fear and greed moving prices away from their long run or equilibrium prices.

Net–Net

> One of Graham’s favorite value-oriented strategies to pick investments was to find companies selling for less than their cash-liquidation value. He called this deep-value strategy Net–Net.

  ○ Graham’s Net–Net calculation started with the cash and cash equivalents item on a firm’s balance sheet and then added a conservative portion of accounts receivable and inventory. Then he subtracted all liabilities.

  ○ He compared this aggregate amount of cash and hard assets to the stock market value of the firm. If the company was selling for less than market value, Graham would consider it a bargain under his Net–Net deep-value approach.

> He estimated that his Net–Net strategy provided his partnerships with returns of approximately 20% a year, double the market’s historical return.
Northern Pipeline

> The investment that put Graham on the map was known as the Northern Pipeline Affair, a Net–Net investment. Northern Pipeline Company was one of Standard Oil’s 34 spinoff companies. Its business involved transporting crude oil to a Standard Oil refineries.

> After the Supreme Court decision breaking up Standard Oil, Graham combed through the forms that energy firms filed with the Interstate Commerce Commission. He found that Northern Pipeline had $95 a share in railroad bonds and other liquid assets. Yet the stock was trading for only $65 a share, and it paid a hefty 9% annual dividend yield.

○ In 1926, Graham’s partnership acquired roughly a 5% stake in Northern Pipeline, and he asked the company to distribute more cash to shareholders. Northern Pipeline’s management wasn’t pleased at being told what to do and actively avoided his requests.

○ In 1928, after contacting other shareholders and requesting their help, Graham put together proxies, or voting power, equal to 38% of Northern Pipeline’s shares and was able to get himself appointed to the firm’s board of directors.

> Over time he persuaded the company to pay out $70 a share in special or extra dividends. Coming in the midst of the Great Depression, it was a very attractive return from Graham and his partners.

Government Employee Insurance Company

> GEICO was Graham’s most famous investment. GEICO wasn’t Net–Net, but it had unique value, such as its superior business model of selling car insurance. Graham purchased almost half of the company for his investment partnerships in 1948, at a 10% discount to its book value.
GEICO rode the wave of the post-World War II American automobile industry. Among its advantages was the clever business model of selling directly through the mail at discount prices. Drivers benefited from lower car insurance prices, while GEICO benefited from its lean infrastructure, avoiding the need to build a costly network of offices and salespeople.

Seven Defensive Investing Strategies

Graham made a distinction between the enterprising investor and the defensive investor. The difference was based on the ability of the investor to put time and effort into the research process.

For the defensive investor, Graham suggested 7 factors in selecting a common stock. Unlike his Net–Net strategy, there will almost always be a fair number of firms that meet these 7 criteria.

- Adequate Size. Graham viewed adequate size in a target company as more than $100 million in 1971 dollars, or about $600 million today. He viewed traditional, government-regulated utilities as safer than industrial firms, so you could cut the adequate size threshold in half for utilities. Graham reasoned that larger firms are less likely to go out of business; that they probably have resources, scale, and experience to weather any storm.

- Sufficiently Strong Financial Condition. Graham defined this term as current assets at least twice the size of current liabilities. He also thought total liabilities should not be higher than working capital (that is, current assets minus current liabilities).

- Earnings Stability. Graham defined earnings stability as positive earnings for at least 10 consecutive years. This rule eliminates many cyclical firms and those younger than 10 years.
○ A Strong Dividend Record. This criterion recommends 20 years or more of uninterrupted dividends. This rule eliminates most growth stocks, since the vast majority don’t pay dividends.

○ Organic Earnings Growth of at Least 33% over the Past 10 Years. This hurdle is not huge since the United States’ Gross Domestic Product (GDP) historically grew at about 3% per year. But it does eliminate businesses that are stagnant or shrinking, even if they pay dividends or generate a lot of cash.

○ A Moderate Price-to-Earnings Ratio. Graham defined this term to be the current price of the stock as not more than 15 times its average earnings over the past 3 years. This number makes sense to many investors, since the long-term P/E ratio for U.S. stocks is about 15.

○ A Moderate Ratio of Price to Assets. Graham defined a moderate price-to-assets ratio as a firm trading for less than 1.5 times its book value. Book value is also known as accounting net worth. It’s equal to all of the firm’s assets minus all of its liabilities. This factor of less than 1.5 times book value also rules out most growth stocks since they often trade at a high multiple of Price to Book.

> In his later years, Graham suggested another simple value formula: Create a portfolio that consists of at least 30 stocks with P/E ratios less than 10 and debt-to-equity ratios less than 50%. Hold each stock until it returns 50%. If it doesn’t achieve a 50% return after 2 years, sell it no matter what. Graham back-tested this formula and found it to earn about 15% a year over the previous half-century.

Graham’s Legacy

> Benjamin Graham made seminal contributions to measuring value, viewing stock as the ownership of a business, and investing with a margin of safety. He made clear the distinction between speculation and investment: “An investment operation is one
which, upon thorough analysis, promises safety of principal and an adequate return. Operations not meeting the requirements are speculative."

> Many of the most successful investors of the 20th and early 21st centuries were hugely influenced by his work.

> Value investing requires analytical rigor, discipline, patience, and willingness to go against the crowd. Graham was able to follow this approach, and his investment firm posted annualized returns of about 20% per year from 1936 to 1956—roughly double that of the market.

Suggested Reading

Graham and Dodd, *Security Analysis.*
Graham and Zweig, *The Intelligent Investor.*

Questions to Consider

1. How would you describe the investment strategy of Benjamin Graham?

2. How would you define value investing?
Warren Buffett had success written all over him at a young age, but his investment strategy began to take shape only after he met the value investor Benjamin Graham. Buffett initially embraced Graham’s strict value investing strategy by looking at companies in a quantitative manner and trying to buy companies for the equivalent of 50 cents on the dollar. Buffett’s contribution to the concept of value investing was to find high-quality companies selling at a discount and to let the moat around these companies protect his investment, enabling him to hold them for his favorite holding period—forever.

The Birth of Berkshire Hathaway

> Warren Buffett always ranks near the top of *Forbes*’s list of the richest people in the world, and virtually all of his net worth has been generated by investing. As the CEO of Berkshire Hathaway, his investment holding company, Buffett typically is paid $100,000 a year; unlike many hedge fund managers, Buffett doesn’t skim off a large percentage of the investment profits he generates.

> Buffett had a nose for making money even as a young child growing up in Omaha. While still in elementary school, he sold
packs of Wrigley’s gum and cans of Coca-Cola, both future investments for him. He bought his first stock at the age of 11 and filed his first tax return at the age of 13.

> After finishing his undergraduate degree at the University of Nebraska, he applied to Harvard and was rejected. It turned out to be a blessing in disguise, because he was accepted at Columbia and studied under the man who would change his investing life, the pioneer of value investing Benjamin Graham.

> When Graham decided to wind down his investment business, which Buffett had joined in 1954, Buffett set up his own investment business through a series of partnerships that were, in essence, hedge funds. In 1969, Buffett decided the stock market was overvalued and shut down the investment partnerships. He recommended 3 options to his partners at the time.

  ○ Take the cash from the liquidated partnerships.

  ○ Invest with his friend, the value investor Bill Ruane, of the Sequoia Fund.

  ○ Take shares in a company he controlled—Berkshire Hathaway.

> Buffett acquired Berkshire shares in 1962, when it was a struggling textile maker. The textile business never turned around, but Buffett used the cash flow to acquire other businesses. One of Berkshire’s investing hallmarks was insurance, which historically accounts for the bulk of its profits.

  ○ An insurer has the use of every insurance premium for a period of time—from a day to months to forever—before it has to pay a claim on someone’s behalf. This time-value of money, called the “float,” is a boon to an investor like Buffett, who can put it to good use.

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The Moat as a Competitive Advantage

Eventually, Buffett moved away from Graham’s strict approach. He continued buying companies at a discount, but his focus shifted to high-quality companies, especially those with a durable competitive advantage—what Buffett called a moat—a buffer around a company’s core business that makes attack difficult for the competition. Two popular approaches to analyzing a company’s moat are Porter’s 5 Forces and Morningstar’s Economic Moat Framework.

Michael Porter is a Harvard Business School economist who in the 1980s developed a framework to help explain the impact of industry structure on performance, generally referred to as Porter’s 5 Forces.

- The threat of new entrants. Certain businesses require massive capital to get started. The Boeing and Airbus commercial-aircraft manufacturing business is a case in point. The harder it is for a new firm to enter a market, the greater the competitive advantage of the firms already in that market.

- The threat of substitute products or services. Although some products have no substitute, most industries offer a variety of substitutes: Coke vs. Pepsi. The fewer substitute products or services, the greater the competitive advantage.

- The bargaining power of customers. The Internet has given customers great power. Best Buy went from being a dominant company to one struggling to survive because customers could search for better prices on Amazon.com and other websites.

- The bargaining power of suppliers. The less a firm is impacted by its suppliers, the greater its competitive advantage. The De Beers cartel of South Africa controls about 35% of the diamonds produced in the world. De Beers has extraordinary
bargaining power when dealing with jewelry merchants. Conversely, clothes can be manufactured fairly cheaply in many places around the world, so companies like Nike have a lot of power in their supplier relationships.

- The intensity of competitive rivalry. Firms in the airline industry, such as U.S. Airways, went bankrupt because of intense competition. Conversely, the less intense the rivalry, the greater the competitive advantage.

> Morningstar, a firm known for its research on mutual funds, created a framework for its research rating based to a large extent on a company’s moat. Like Porter, Morningstar identified 5 factors.

- The first factor is the network effect. Why do people shop at eBay? Because millions of items are for sale. Why do people join Facebook? Because nearly all of their friends are on it. Why do people shop at Amazon.com? For the huge selection as well as the millions of reviews. Morningstar believes a network effect occurs when the value of a company’s service increases, as more people use the service.

- The second factor is intangible assets. A patent is an intangible asset that provides legal protection lasting up to 20 years. A brand name is an invaluable asset that can be hard to quantify, but easy to see in action.

- The third factor is cost advantage. The concept of a cost advantage can easily apply to many industries. For example, stories abound of Wal-Mart and Home Depot driving their smaller competitors out of business because they couldn’t match the larger firms’ low prices. Having a cost advantage also gives these companies the opportunity to raise prices without worrying about losing the bulk of their customers.

- The fourth factor is switching cost. Imagine if you had a new alarm system installed in your house. It would be expensive to
switch it for a new system, even if the new system had lower monthly fees. The same concept applies to other products.

- The fifth factor is efficient scale. Efficient scale relates to a niche market served by a small number of companies—in some cases, only one. For example, building a hospital is a massive undertaking, so there is likely to be only one in each town or county.

> Buffett came to believe that a better approach to value investing would be to buy high-quality companies with a moat around their businesses. His 1963 investment in American Express was perhaps his first major purchase in sync with this philosophy.

- The story begins with salad oil. Though American Express is known today for its financial products, the firm has operated in a number of finance-related businesses. One was warehousing: Amex would lend money against the inventory of a company’s goods, stored in a warehouse that Amex’s employees could inspect.

- Allied Crude Vegetable Oil Refining Corporation borrowed money against its inventory of salad oil. But the company committed fraud, filling huge barrels with water and sprinkling salad oil on top. Eventually, the fraud was uncovered, with the result that Allied Crude filed for bankruptcy.

- Amex was on the hook for $150 million, or about $1.5 billion in 2015 dollars. In the wake of the salad oil scandal, Amex’s stock fell 50%. Buffett thought this was a bad but temporary misstep and that the core business was intact and the damage to Amex’s brand name would eventually be repaired.

- Buffett bought 5% of American Express, 40% of his partnership’s assets at the time. The result was that Buffett sold his partnership’s shares in Amex about 5 years later at more
than 5 times the profit. Berkshire has long since staked a new position in American Express and added to it over 25 years.

**Boldness in a Crisis**

> The epicenter of the financial markets crisis was the housing industry and the subprime mortgages lent to people with poor credit ratings. Bank risk managers reasoned that if the borrower couldn’t pay the mortgage, they could simply take the house as collateral. They believed the house would rise in value so they wouldn’t lose on a diversified portfolio of these loans. When consumers defaulted on their loans and real estate prices crashed, excessive leverage (debt-to-equity ratio) on the part of both consumers and banks led to financial disaster.
Purchasing a house with a 20% down payment results in leverage of 5 to 1; many banks were leveraged at a ratio of 30 to 1 or more. The investment bank Bear Stearns was one of the first casualties of the housing and financial markets crisis. It was sold to JP Morgan for $2 a share. Lehman Brothers, an investment bank that had been around since 1860, declared the biggest bankruptcy ever.

In this financial environment in September 2008, Buffett had the confidence to invest in Goldman Sachs and General Electric Capital Corporation. Buffett invested $5 billion in Goldman and $3 billion in GE convertible preferred stock with a 10% dividend. By March 2011, Buffett earned $3.7 billion in realized and unrealized profit on Goldman Sachs. By September 2011, he made at least $1.2 billion from his GE investment.

Some Losing Investments

But even The Oracle of Omaha can make blunders. Buffett often refers to Berkshire’s purchase of Dexter Shoe Company as one of his worst investments ever. In 1993, Berkshire paid $433 million for the Maine-based shoe company. Buffett’s biggest mistake wasn’t that Dexter’s shoe business deteriorated rapidly. It was that he paid for the deal in Berkshire stock, which has risen exponentially since the purchase. He has rarely used Berkshire stock in future acquisitions and had a successful investment in the dominant casual shoe company, Nike.

His investment in IBM was also criticized by some investors, who viewed IBM as a dinosaur in a technology world dominated by Google, Apple, Microsoft, Amazon, and the like. Buffett first started buying IBM in the first quarter of 2011. He invested more than $13 billion at a cost basis of $170 a share. Recently, IBM was trading at roughly $160 a share, resulting in a paper loss of more than $750 million.

In the end, the numbers speak for themselves. In the 50 years after Buffett took over Berkshire in 1965, the S&P 500 was up
11,355%. In contrast, over the same period, Berkshire’s stock was up an amazing 1,600,000%.

Suggested Reading

Lowenstein, Buffett.
Schroeder, The Snowball.

Questions to Consider

1. How would you describe the investment strategy of Warren Buffett?

2. What does Warren Buffett mean when he talks about a company having a “moat” around its business?
Philip Fisher and Thomas Rowe Price Jr. are the two individuals most associated with growth investing as a valid and important investment strategy. In extreme cases, growth stocks have the potential to go up 1000% or more from inception. Occasionally, you’ll find a growth stock in the bargain-basement bin. But, usually, it’s up to you to make the assessment that a growth stock will keep growing, and that paying a somewhat high price today is a good gamble for a stock that is headed higher.

**Growth Stocks**

> A growth stock is like a first-round draft pick: A lot is expected and it is in great demand, so it usually sells at a high price. One reason is that a stock can split.

- You might own 100 shares of a stock trading at $50 a share, for a total of $5000.

- After a 2-for-1 stock split, you would now own 200 shares of the stock at $25 a share, but the aggregate value would remain the same: $5000.
Relying on price alone might not be a meaningful way to differentiate between growth and value stocks. Thus, analysts look at other measures of valuation. The two most common are the price-to-earnings ratio (P/E) and the price-to-book ratio.

- The P/E ratio is the price of a share divided by its annual earnings per share. If the P/E of the market is at 15, any stock with a P/E of less than 15 would be considered a value stock, while a stock with a P/E higher than 15 would be considered a growth stock.

- The price-to-book ratio is the price per share of the stock divided by the book value—that is, the accounting value or net worth figure on the balance sheet—per share.
○ A high price-to-book ratio suggests a growth stock: It’s valued in part on its future potential. A low price-to-book ratio indicates a value stock: It might be undervalued relative to its intrinsic worth.

> Another way to differentiate growth from value stocks is the average valuation level of the market. Anything above the current market average is considered to be a growth stock, while anything below average is considered a value stock.

**Philip Fisher**

> Philip Fisher was born in San Francisco September 8, 1907. He attended Stanford University and earned a bachelor’s degree in economics. In 1931, he set up his own investment advisory firm, Fisher & Company, retiring in 1999 at the age of 91.

> For many years, Fisher taught an investments course at Stanford, and his location in the San Francisco and Silicon Valley area positioned him to become an early investor in several venture capital and private equity investments.

> Philip Fisher is probably best known for his bestselling book, *Common Stocks and Uncommon Profits*, in which he lays out his investment philosophy.

**Investment Strategy**

> As a growth investor, Fisher looked for companies with the potential to significantly grow sales for several years into the future. The quality of a firm’s sales force was one of the factors that Fisher assessed. A firm that grows sales at a faster rate than the industry is one sign of a good quality sales organization.

> Fisher was also one of the first investors to conduct rigorous fundamental analysis, which goes beyond looking at a company’s
financials to include talking to management, competitors, suppliers, former employees, and others.

Fisher looked at the integrity of a target company’s management. Signs of quality management included the following factors:

- Management talks freely to investors about its affairs when things are going well and when they’re not.
- The firm is able to keep growing when a product has run its course. Can they come up with a new and improved version? Or pivot to selling a somewhat related product?
- The company’s research and development function, or R&D is robust. Does a significant part of a company’s sales come from new products?

Profit margins differ dramatically by industry. For example, supermarkets might have profit margins in the low single digits, while software or pharmaceutical firms often have profit margins greater than 20%. Growth stocks typically have above-average profit margins.

Fisher would often ask a company’s management what it was doing to maintain or improve its profit margins relative to its competitors, and he liked companies that had a focus on profits for the long term.

Fisher advocated owning a relatively small number of investments in a portfolio—roughly 30. He felt that owning too many stocks made it impossible to watch all the eggs in all the different baskets. He felt that buying a company without a detailed understanding of the business could be riskier than limited diversification.

Fisher also believed that when finding attractive investments is hard, the market as a whole might be overvalued; you should consider taking some money off the table.
T. Rowe Price

> Thomas Rowe Price Jr. was born in Glyndon, MD, March 16, 1898. He earned a bachelor’s degree in chemistry from Swarthmore.

> After a brief stint as a chemist at DuPont, Price realized that his passion was in the financial markets, and he joined the Baltimore brokerage firm of Mackubin Goodrich, today known as Legg Mason. He worked his way up to become the firm’s Chief Investment Officer, but he wanted to develop his ideas about growth stocks.

> After a disagreement with the other executives at the firm, he left in 1937 to set up T. Rowe Price Associates. He charged a fee for his investment services, in contrast to the commission approach that was widespread at the time.

> Price produced tremendous long-term returns. If you invested $1000 in his recommended stocks in 1934—with dividends reinvested—it would have grown to $271,201 by the end of 1972 during which time $1000 invested in the market as a whole grew to only about $66,000.

Investment Strategy

> Price is probably best known for his life-cycle approach to investing. He felt that the risks of owning a stock increase when the industry it competes in matures. He wanted to buy stocks when earnings were increasing or accelerating. The industry life cycle typically has 4 stages.

  o A period of rapid and increasing sales growth. For example, think about the early stages of the Internet, when many startups occurred and the aggregate industry experienced exponential growth.
○ A period of stable growth. Consolidation tends to occur during this phase. Smartphones are one example. Even after cell phones had been around a while, the ability to turn a phone into a mini-computer with millions of apps resulted in stable growth with a limited number of firms capturing the lion’s share of the profits.

○ Slowing growth or maturity. Coca-Cola’s stock might be an example. Today, it might be too big and its market too saturated to consistently grow at double-digit rates.

○ Minimal or negative growth. The industry revenues and earnings are in relative decline. The railroads were an example of this factor after being eclipsed by the automobile, but they found a second life in transporting increased commodities, rather than people.

> Price’s preferred hunting ground was the stable growth phase since it is more predictable and less volatile than the startup phase.

> Within the growth-stock universe, Price differentiated between two types of growth. The first is cyclical, where the magnitude of the industry’s growth is tied strongly to the economy. For example, during the 1950s auto sales grew sharply.

> The other type is stable growth. In this case, sales are not highly dependent on the specific phase of the economic cycle. For example, health care stocks can grow strongly during a recession.

> Price also looked at a range of criteria:

○ Superior research and development activities likely to spur future growth. 3M—a stock Price held for 33 years—is one company known for its R&D and innovation.
Avoidance of cutthroat competition. Firms that engage in teamwork are more likely to be stable and around for the long term.

Relative immunity from government regulation. This criterion knocks out several industries, including utilities, financial services, and energy.

Low total labor costs but fair employee compensation. Costco made a reputation for generating great growth in its stock price while paying above-average wages to its employees relative to other firms in the industry.

Besides high growth in sales and earnings per share, Price also wanted stocks with at least a 10% return on invested capital. Return on invested capital can be calculated a few ways, but one popular approach divides net income by capital, basically the value on its balance sheet of its debt and equity.

Many industries are defined by a sort of Darwinian process of elimination for achieving high profits. Price recognized this dynamic and suggested finding the most promising company or companies in a growth industry. He also provided some insight on how to determine when a firm was losing its edge.

Companies lose patents and new inventions may make old inventions obsolete. For example, Pfizer’s stock price struggled for years after its best-selling cholesterol drug, Lipitor, went off patent.

The legislative or legal environment can get worse for a firm, affecting its ability to grow. For example, defense firms are largely dependent on the federal budget.

The costs of labor and raw materials also affect a firm’s profitability significantly. For example, the price of jet fuel is one of the largest costs to running an airline.
Conclusion

> Philip Fisher and T. Rowe Price Jr. helped establish growth investing as a valid strategy, and their focus on the long term or, more accurately, the very long term, was novel at the time.

> Fisher’s book, *Common Stocks and Uncommon Profits*, was one of the first bestsellers on the subject of personal finance and played a part in transforming the stock market from a playground for the rich into a legitimate arena for savings and investments.

> T. Rowe Price thought that investing in a leading company in a fast-growing industry was like sailing with the wind at your back. He fleshed out his ideas by carefully looking at sales growth, earnings growth, profit margins, and return on invested capital. He bought leaders and held them for long periods of time—several decades in some cases.

> Price’s philosophy of putting customers’ interests first was a novel idea when he established his firm in the 1930s, and his method of doing business won out. His excellent investment performance added great value to his clients. And today his namesake firm, T. Rowe Price, manages roughly $750 billion.

Suggested Readings

Fisher, *Common Stocks and Uncommon Profits*.
Train, *Money Masters of Our Time*.

Questions to Consider

1. How would you describe the investment strategies of Philip Fisher and T. Rowe Price?

2. How would you define growth investing?
Not until the 1950s did we have a rigorous way of measuring risk. A young graduate student named Harry Markowitz published an article in *The Journal of Finance* related to his doctoral dissertation at the University of Chicago. Markowitz made the immense contribution of putting risk on equal footing with return. His work in this area won him a Nobel Prize in Economics. Before Markowitz, risk played second fiddle to return. People took kind of a shotgun approach when trying to reduce risks by diversifying across assets, companies, and industries, in an imprecise manner.

**Developing the Markowitz Portfolio Theory**

> Modern portfolio theory has its roots in Markowitz’s work in the early 1950s. It’s still called modern portfolio theory all these decades later because changes in investment thought over the past 50 years have been incremental or evolutionary, rather than radical.

> Many great accomplishments in life start out with what appears to be a random series of coincidences. Markowitz was looking for a dissertation topic in the early 1950s. He was waiting outside his advisor’s office when he met a stockbroker.
The broker suggested that Markowitz write his dissertation on something related to the stock market. Markowitz’s advisor thought the idea had merit and sent him to discuss possible topics with the dean of the business school, who recommended a book called The Theory of Investment Value, by John B. Williams.

The essence of this book is still taught in finance classes: The price of a stock is equal to the value of its future dividends, adjusted for the time value of money. That is, a dividend of $1 today is worth more than a dividend of $1 in the future.

Markowitz concluded that if you followed Williams’s logic, you would wind up with a portfolio of a small number of stocks because everything else had an inferior return. But in practice, Markowitz knew, people diversified their portfolios fairly widely.

The book, Introduction to Probability, by James Uspensky, profoundly influenced Markowitz’s thinking. Its formula for the variance of a weighted sum essentially is used to calculate the variance of a portfolio—a popular measure of risk.

Markowitz also learned about the production possibility frontier concept, which posits that an economy makes tradeoffs in what it produces. It can produce a lot of one good and nothing of another or some combination. Markowitz now had the idea to create a frontier that made a tradeoff between risk and return.

Variance and Correlation

Although there is no uniform way of measuring risk, many economists focus on measures of volatility. The standard deviation—the square root of variance—is one widely used measure of volatility. Markowitz used standard deviation as his primary measure of risk, but he recognized the possibility of using other measures of risk as well, such as returns below a certain threshold.
Markowitz had the further insight that the risk of a portfolio is primarily based on the interaction of the portfolio’s holdings, not on the risk of the securities individually or in isolation. He arrived at this insight, in part, from the formula on variance in Uspensky’s book.

- According to Markowitz’s Portfolio Theory, two securities that are very risky in isolation—say a retail stock in Singapore and a health care stock in Brazil—might have less risk than two blue chip stocks in the United States because the U.S. stocks probably move in tandem because of their dependence on the U.S. economy.

- In contrast, retail sales in Singapore probably have little to do with health care in Brazil. One may zig, while the other zags. This lack of common movement reduces the overall risk of the portfolio.

- The mathematical term for the way two assets move with or against each other is correlation, a number that ranges between negative one and positive one. Two securities with a positive correlation move in lockstep: When one goes up, the other goes up, and they have little diversification. The art of picking a diversified portfolio is to select securities that have low correlation and positive expected returns.

The Optimal Portfolio

- Markowitz’s remaining challenge was to find the best portfolio for any particular person: an optimal portfolio. Markowitz returned to the notion of the production possibility frontier and imagined a graphed curve that shows the range of portfolios that maximize return for a given level or tolerance of risk.

- Markowitz called this curve the efficient frontier. Any portfolio below the efficient frontier is inefficient, and no rational person would select it because it would yield a lower return and/or higher risk than another possible portfolio.
Risk tolerance is estimated by an indifference curve that measures willingness to trade off outcomes—in this case risk and expected return. The optimal portfolio for you is the place where your indifference curve matches the efficient set of portfolios.

William Sharpe

What if all investors tried to maximize their returns according to their risk tolerance? William Sharpe set out to find the answer in his own Ph.D. dissertation. It described a way to simplify the calculation of efficient portfolios that were the output of Markowitz’s Portfolio Theory.
He continued to think about what prices would look like in equilibrium if everyone tried to maximize the returns for a given level of risk. Sharpe’s insight was that the only risk worth paying for is risk that can’t be diversified away—that is market risk, or what academics call beta.

Sharpe developed a model showing that the expected return on any risk asset is equal to the risk-free rate of interest plus the market risk of the asset (beta) times the market risk premium as a whole. The model is known as the Capital Asset Pricing Model or CAPM.

**Capital Asset Pricing Model (CAPM)**

The risk-free rate, say a fixed-income security issued by the government, is virtually free of default. It should be the minimum hurdle for any investment to pass.

To this risk-free rate add beta. The average beta of the market as a whole is one. Therefore, stocks with a beta lower than one are less risky than the market. Stocks with a beta greater than one are riskier than the market.

The market risk premium is the expected return on the market minus the risk-free rate. The market premium is tied to market psychology, so it can expand or contract. On average, it tends to be around 6% or 7%.

According to the theory, a portfolio of high beta stocks yields a high return. When the market goes up, such portfolios tend to outperform the market and low beta portfolios tend to underperform the market. But when stocks go down, portfolios of low beta stocks tend to lose less than high beta portfolios.

Sharpe published the Capital Asset Pricing Model in 1964, and since that time other academics have been finding chinks in its armor. Perhaps the most important paper published on this topic was by Eugene Fama and Ken French.
○ They found that with data going back to the early 1930s, the CAPM worked pretty well. It showed a straight line relationship between risk and return, as predicted by the theory.

○ But for the period from 1966 to the present, the theory held up less well. High beta stocks returned less than expected and low beta stocks returned more than expected. In some respects, the theory was turned upside-down: Many low-risk investments outperformed many high-risk investments.

> Given these results, Fama and French set out to better explain the relationship between risk and return. They found two factors that mattered greatly: size and style.

○ Size is the market value or market capitalization of the firm. It equals the stock price times the number of shares outstanding. Over long periods, small cap stocks outperform large cap stocks. This finding makes intuitive sense, since small firms are nimbler and can grow quickly from a smaller base.

○ Style refers to growth or value. Value stocks historically return more than growth stocks over long periods because growth stocks tend to be glamorous, and investors often bid them up. Eventually, some run into competition or have missteps and fall back down to earth. Since not much is expected of value stocks, they often fix their problems and show a surprise upside.

> Professors Fama and French used the price-to-book variable to differentiate between growth and value. The price part of the ratio is the market capitalization that measures size. The book part of the ratio in the denominator is the net worth item on the balance sheet.

○ Book value equals all the assets on a firm’s balance sheet minus all its liabilities. A firm with a lower than average price-to-book-ratio is considered to be a value stock, while a firm
with a higher than average price-to-book ratio is considered to be a growth stock. The historical average price-to-book ratio of the Standard and Poor 500 is about 2.5.

> Combining the two factors results in the following historical results:

○ Small cap value stocks usually have the best performance over long periods.

○ Large cap growth stocks usually have the worst performance over long periods. In the short run, investors might gravitate toward the safety of large cap growth stocks, especially during times of market distress, but over the long term, fear usually fades, and these investments tend to provide lower returns.

Momentum and Liquidity

> Momentum investors buy stocks that have been rising and sell or sell short investments that have been falling. In the short run, say a year or less, researchers have found that momentum works. High flyers keep flying and losers keep falling.

> Liquidity refers to the ability to sell an asset quickly and at fair market value: Your house is probably not liquid, but blue-chip stock, U.S. Treasury bonds, notes, and bills are liquid.

○ Researchers have found that over long periods, investors get paid to own illiquid assets. These assets are basically another type of risk.

○ During times of distress, the opposite usually holds. That is, people gravitate towards the safety of liquid investments.

> According to the theories and empirical evidence, if you want to make the most money, buy illiquid, small cap, value stocks that have upward momentum. The stocks that tend to have the lowest return are the most liquid, large cap growth names, with downward momentum.
But if you follow this approach, be prepared to hold onto your hat when the market is falling, because in the short run you will lose the most money with this kind of security.

Suggested Readings

Bernstein, *Capital Ideas.*
Markowitz, *Portfolio Selection.*

Questions to Consider

1. How would you describe Harry Markowitz’s approach to selecting an optimal portfolio?

2. According to the Capital Asset Pricing Model why is market risk more important when forecasting stock returns than company specific risk?
Index funds are mutual funds that track the performance of specific index, like the 30 stocks in the Dow Jones Industrial Average. They’re not sexy, and they’re unlikely to help you get rich quickly, but today they account for more than 20% of all mutual fund assets. An exchange-traded fund, or ETF, is an investment that is constructed like a mutual fund but trades like an individual stock. The theoretical underpinning of the value provided by index funds is intense competition.

Making the Market versus Beating the Market

> Because investors will act on important information when they come across it, market prices usually reflect all relevant information. Such a market is said to be efficient. An entire theory attaches to this thought process, called the efficient market hypothesis. Its roots go back to 1900 and the doctoral dissertation of French mathematician Louis Bachelier, who argued that prices typically follow a random pattern.

> The concept of efficient markets is upsetting to many active fund managers. It basically says that a monkey throwing darts at the stock pages of *The Wall Street Journal* will select a portfolio
that performs about as well as one chosen by professional fund managers. The reason is that investors compete intensely; over time, competition swallows all the easy money opportunities. Only new information impacts the price of a stock, and that is, by definition, unpredictable.

Noble laureate Eugene Fama breaks the efficient market hypothesis into 3 forms, or information sets:

- Weak-form efficiency, wherein investors can't consistently beat the market using historical price and volume data.

- Semi-strong form efficiency, wherein investors can't consistently beat the market using any public information; not only the historical price and volume information, but also a company's financial statements, and whatever other information is available.

- Strong-form efficiency, wherein investors can't consistently beat the market using any information, whether historical price and volume data; public information; or private, inside information.

The bulk of the academic studies of the efficient-market hypothesis find that the market is both weak form and semi-strong form efficient, but that the market is not strong-form efficient. Rather than citing a laundry list of academic studies, perhaps the best "proof," of weak and semi-strong market efficiency is the performance of professional fund managers. Most can't beat a simple index, despite their advantages.

An index tracks a basket of stocks. The oldest is the Dow Jones Industrial Average, which tracks the performance of 30 blue chip stocks. Index funds have very low trading costs, since they essentially buy and hold forever. The typical cost of an index fund is about 0.2%, and sometimes much less. Some index funds charge no fee, with the sponsoring company hoping to make money by also selling the customer some other product or service.
○ An index fund helps answer at least two important questions. The first is, “How did the market do today?” You need to measure market performance to answer that question.

○ The second is, “How is my portfolio doing?” To answer that question, you probably want to compare the performance of your portfolio to a benchmark like a market index such as the S&P 500.

> A quantitative group within Wells Fargo created the first index fund in 1971. It was an equal-weighted index based on a group of large stocks trading on the New York Stock Exchange. Equal weighted means the price changes in the smallest stock have the same impact on the index returns as the price changes in the largest stock.

> John Bogle, the founder and retired CEO of the Vanguard Group created the first index mutual fund in 1975. This landmark fund, based on the performance of the S&P 500, changed the financial landscape in ways that Bogle probably never imagined.
John Bogle

> John Bogle was born May 8, 1929, in Montclair, NJ. His family, like many others at the time, lost most of their wealth during the Great Depression. Nevertheless, he attended the Blair Academy on a scholarship. He also worked at a series of jobs to help pay for school expenses. Bogle attended Princeton University, also on scholarship, where he studied economics. One afternoon, in the Princeton library, Bogle came across a *Fortune* magazine article titled “Big Money in Boston.”

> Mutual funds, as we know them today, had originated in Boston in 1924, and most of the funds at the time operated in that region. Bogle decided to write his senior thesis on mutual funds. His thesis found that the average mutual fund didn’t outperform the market, and he suggested that the industry would be best served by lowering sales charges and management fees.

> Princeton alumnus Walter L. Morgan—the founder of the Wellington Fund—read Bogle’s thesis and offered him a job. By the mid-1960s, he made it clear that Bogle was in line to run the firm. Bogle officially became president of Wellington in 1967 and CEO in 1971. Wellington was an actively managed investment firm—it did not follow the passive management strategy of index investing that Bogle prescribed—and it remains so to this day.

- The late 1960s were a bull market in U.S. stocks, and the funds that did the best employed momentum and high turnover strategies. They owned names like Xerox, Polaroid, and IBM and other well-known growth stocks. The investment mindset at the time was that these companies were so strong that they could be successfully bought regardless of their price. The thinking, which was eventually shown to be flawed, is that these companies could grow their way out of any problems.

- Wellington’s performance in the mid-1960s was disappointing and, in 1966, Bogle made the decision to merge with Thorndike,
Doran, Paine and Lewis. The go-go stocks began to fall a short time later and ran into a terrible bear market during the 1973–1974 period, when the S&P 500 fell by about half.

**Vanguard**

> Vanguard was not organized as a traditional for-profit corporation, but rather as a mutual share company. Vanguard returns all its profits to the mutual funds it administers. This practice results in lowering expense ratios even beyond the relatively low costs of index fund-based investing. In a mutual form of ownership, the shareholders are the owners.

> Vanguard quickly expanded into running its own funds: first active, then passive (or index) funds and still offers many actively managed funds that account for about one-quarter to one-third of the firm’s assets. But even these are relatively low cost, and the net profits from the management fees of running the funds accrue to the shareholders of the funds. With about $3 trillion in client assets, Vanguard is a major presence in the mutual fund industry today.

> At the end of 1975, when Vanguard launched the first index mutual fund, some critics said that trying to market average returns was un-American. Bogle was hoping to raise $150 million at the launch, but raised only $11.3 million, and it would be another decade before the fund had any material competition in index based investing. But over time, people couldn’t argue with the fund’s performance, tax efficiency, and bargain-basement fees.

**Advice for Investors**

> John Bogle stepped down as CEO of Vanguard in 1995 and left its board in 1999. He has written about 10 books, in which he lays out his investment philosophy. Bogle cautions against paying a lot of money for financial advice. Although not denying that some investors could benefit from using advisors, for example,
to prevent them from doing irrational things with their money, he questions how much value advisors can add to performance.

> Bogle believes that past fund performance may offer some predictive value in establishing the risk of a fund, and its long-term consistency, but it should not be overrated or overemphasized. For example, a fund that owns mostly utility and consumer staples stocks is likely to have less risk than the market as a whole over long periods, assuming the fund doesn’t materially change its strategy or types of holdings.

> Bogle also suggests that we be somewhat wary of star mutual fund managers. For every Peter Lynch or John Neff who consistently generate strong returns, many one- and two-hit wonders call a dramatic market turn and later badly underperform.

> Bogle cautions awareness of the law of large numbers for actively managed funds. That is, the bigger a fund gets, the harder is it to outperform. One reason is that large funds are generally tilted towards large stocks that are widely followed; the manager is unlikely to uncover something unknown by the market, generally a precondition for outperformance.

> For nearly all investors, Bogle suggests a long-term buy and hold approach. He advises looking at your portfolio once a year so you can have the miracle of compound interest and returns work in your favor without the urge to make too many changes.

> John Bogle and Vanguard also played a leading role in two other low-cost, index-oriented strategies. These are target (or horizon date) funds, and tax-advantaged funds.

○ The typical horizon-date fund looks at your planned retirement date. Let’s say you are 40 and plan to retire in 20 years. Because you still have a long time to retirement, your asset allocation in a horizon fund will consist mostly of equity index funds. As you gradually approach retirement age, the horizon

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fund will increase your allocation to fixed-income index funds, because they tend to be steadier, and decrease your exposure to more variable equity investments.

○ If you have assets in a taxable account, it might be possible to get a slightly better outcome using tax-loss harvesting. Let’s say you have a diversified portfolio of investments, and one of your stocks is Goldman Sachs. Suppose Goldman Sachs’s stock is down 15% for the year to date. Tax-advantaged funds would look to sell Goldman Sachs when it was down, take the capital loss, and match it against capital gains in the same account or elsewhere. Estimates vary, but a rule of thumb is that the tax-advantaged fund can add about 1% per year, on an after-tax basis, over a regular index fund held in a taxable account.

> Index funds are best suited for people who don’t have a background in financial investments or who are too busy to devote time to picking individual securities or funds. The efficient market hypothesis is not set in stone. Examples of people and strategies that appear to outperform the market as a whole occur on a regular basis. But outperformance is hard to achieve and indexing is simple—and tough to beat.

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**Suggested Reading**

Bogle, *Common Sense on Mutual Funds*.
Rostad, *The Man in the Arena*.

**Questions to Consider**

1. How would you describe the investment strategy of John Bogle?

2. Do you think passive or active investment strategies are a better route to financial security?
Numerous academic studies have found that over long periods, small-cap stocks tend to outperform large-cap stocks by wide margins. That said, small stocks sometimes also experience huge volatility swings, especially in declining markets. A small-cap stock is generally held to be one valued at less than $1 billion. A stock with a market cap of less than $100 million is called a micro-cap. A company with a market cap of less than $50 million is called a nano-cap.

Small-Cap Fundamentals

> Studies find that small-cap stocks historically provide higher returns than large-cap stocks by an incremental 2 to 3 percentage points per year. Though it might not sound like much, these fractional gains can add up to very large differences over time. Small-cap stocks historically provide higher returns than large-cap stocks because, according to several measures, they are riskier.

> The first measure is market risk, known as beta, which measures the risk of one investment against the market as a whole. Small-cap stocks tend to be more volatile and usually have a higher level of beta than large-cap stocks. The small firms are generally less
established, have shakier financials, and do not pay a dividend, and therefore exhibit higher market risks.

> In addition, small-cap stocks have higher liquidity risk. A liquid asset is one that you can sell quickly and at fair market value. A liquidity risk entails the danger of trading into or out of an asset with a narrow investor base.

> Small-cap stocks also are under-followed by analysts and financial reporters. The lack of coverage means less information about these neglected stocks, which is a negative to investors who want some hand-holding. We can refer to this as information risk. Wall Street firms often have little incentive to follow small-cap stocks because bankers who employ research analysts typically get paid a percentage of the size of the deals they work on.

> These risks might be a negative from some perspectives, but they can also be positive. Higher risk investments generally result in
higher realized returns, but capturing the extra risk premium often takes a long time, often more than a decade.

Passive Small-Cap Strategies

> The easiest way to invest in small-cap stocks is through an index fund or an exchange-traded fund or ETF. The first small-cap index was created in 1984 by Frank Russell and Company and is known as the Russell 2000 Index. This index created an opportunity for investors to become active in the small-cap market without having to individually research and select small stocks.

> It is the most widely followed small-cap index today. More than 90% of small-cap investment managers use the Russell 2000 as benchmark. Standard and Poor, or S&P, also has a small-cap index of 600 names, but it hasn’t gained as much traction as Russell’s.

> In the early 1990s, Eugene Fama and Ken French provided further insight into the large- versus small-cap performance discrepancy. They verified the finding that small-cap outperforms large-cap over long-periods. But they combined this finding with another, which is that value typically outperforms growth over long periods.

> Fama and French don’t view their findings as the Holy Grail of investing. Rather, they think small firms and value firms have higher risks, such as being more prone to bankruptcy, and that’s why they have higher returns.

Warren Buffett Cameo

> Warren Buffett is well-known for his investing prowess. But earlier in his career, Buffett managed much smaller amounts of capital, and had incredible success with small-cap stocks. He has often said that managing large sums of money results in a performance disadvantage. It forces him to hunt for large firms to have a meaningful impact on his portfolio’s overall performance.
○ In one interview, Buffett said that if he were managing only a million dollars instead of tens of billions, he would guarantee returns of 50% a year because he would have no constraints on a target’s size and would not have to worry, when taking a position, about his investment’s impact on the price.

○ Buffett once was asked where individual investors should look for investments. Buffett replied that he thought small-cap stocks were great hunting grounds because large institutions can’t invest there, practically speaking.

> Buffett’s most famous small-cap investment was in Berkshire Hathaway. Today, Berkshire is one of the largest companies in the world, with a market cap in the hundreds of billions of dollars, but it started life as a textile maker. Buffett started buying Berkshire in 1962, at a price of $7.60 a share. Even then, Buffett could see that textile manufacturing was a declining business in the United States, but he saw value in the firm in the form of its working capital, real estate, plants, and equipment.

> Buffett paid $14.86 a share to gain control of Berkshire in 1965. At the time, Berkshire had net working capital of $19 a share plus valuable property. The genius of Buffett was to use its cash flow to help buy other companies—such as The Washington Post, See’s Candy, Coca-Cola, and GEICO insurance, a business that generated a lot of cash itself—either outright or in part through their stock.

Peter Lynch Cameo

> Another famous investor who did well with small-cap stocks is Peter Lynch. He turned Fidelity Investments’ Magellan Fund into the largest mutual fund in the world by the time he stepped down. A $1000 investment in Magellan when Lynch started there in 1977 had turned into $28,000 by his retirement 13 years later.
A significant part of Lynch’s outperformance was due to his investment in small-cap firms. And even after Magellan became large—with an investment portfolio in the tens of billions of dollars—Lynch didn’t completely abandon small caps.

Lynch coined the investment term tenbagger, which refers to a stock that increases 10 times or more from the original purchase price. Dunkin’ Donuts is one of Lynch’s most famous tenbaggers. The relevant point is that it is much easier for a small-cap stock to become a tenbagger than it is for a large one.

Lynch has shared his thoughts on the small-cap market in several of his books. He suggests that with small companies, you are better off to wait until they turn a profit before you invest. This point might seem obvious, but it’s important because small money-losing firms sometimes go out of business.

Lynch also suggests looking for niche companies. Many large companies today started out as niche players. Microsoft began as a firm that developed programs for the BASIC computer language. One of its first big breaks was creating the operating system MS-DOS for the IBM personal computer.

- MS-DOS eventually came to dominate the operating system market. But Microsoft also expanded into the business-software marketplace with MS-Office. The lesson from Lynch is that a small-cap company can eventually dominate its niche and expand to related fields.

- One way to determine if a stock has been “discovered,” so to speak, is to look at the percentage of the stock owned by institutions. This statistic can easily be found at no cost on many financial websites.

- As a rule of thumb, if institutional ownership is less than 50%, the stock is not widely followed by larger investors such as mutual funds, hedge funds, and pension funds. A small-cap
stock can quickly turn into a mid-cap stock when institutions get on board.

> Lynch likes small companies that have proved that their concept can be replicated. Starbucks is a good example of what he means:

○ Starbucks had a concept—a coffee shop that provides a unique experience.

○ The concept began in Seattle, and was developed in one region, the Northwest, before being rolled out nationwide.

○ If Peter Lynch saw a concept like this that could be replicated across the country—and the firm was profitable—he’d be inclined to invest in it.

> Lynch thinks the opportunities abound to find small-cap investments. He says, “The average person is exposed to interesting local companies and products years before professionals.”

Michael Burry Cameo

> If you’ve read the book or seen the movie called The Big Short you probably recognize the name Michael Burry. He was one of the first to recognize the bubble that occurred in the U.S. housing market, and he made an enormous amount of money by betting that the housing market would collapse. He did so by using a complicated derivative instrument called a credit-default swap.

> Although Burry is most famous for that trade, a big part of his financial success can be traced to his investments in small-cap stocks.

> Burry considers himself a value investor and a disciple of value-investing pioneers Benjamin Graham and Warren Buffett. His investment in Hyde Athletic Industries back in 1997 is a good example of his approach to small caps.
○ Hyde Athletic was a maker of athletic footwear. When Burry bought the stock it was selling at a deep discount and less than its net working capital—what Graham called a net-net. Furthermore, the company was growing rapidly.

○ Burry bought the stock for around $5 a share, when its market cap was $31 million. But based on its net working capital alone, the company was worth at least $37 million. Hyde Athletic eventually changed its name to Saucony, its most popular brand, which today has a rabid following among runners. And Burry says he made a 50% return on this small-cap investment.

Conclusion

> Small-cap investing can offer excellent long-term investing possibilities. The easiest way to get exposure to small-caps is by investing in an index fund, which typically are well diversified and relatively inexpensive. You could also invest in one of the many actively managed small-cap mutual or exchange-traded funds.

> A common strategy is to invest in a basket of small, young firms in a rapidly growing industry and then, as the evidence becomes clearer, sell the laggards and put the sales proceeds into the winner—or winners.

> Buffett, Graham, and Burry focused on deep value. They reasoned that the deep value in neglected stocks would eventually be realized by the market. Or you could take the Peter Lynch approach, and focus on small companies that are profitable, have a niche, and can eventually replicate their product on a larger scale.

> Many small and risky investments end up losing money, and going out of business. But those that turn out to be winners sometimes return multiples on the initial investment. In baseball a good hitter is one who can make a hit in 1 of 3 at-bats. In the same way with
small-cap stocks, you don’t need to bat a thousand to generate a winning long-term return.

Suggested Reading


Questions to Consider

1. How does investment in small and mid-cap stocks differ from investing in large cap stocks?

2. Why do the stocks of small companies historically outperform large ones, over long periods of time?
Sir John Templeton, one of the pioneers of global investing, said, “If you search worldwide, you will find more bargains and better bargains than by studying only one nation.” And Templeton didn’t just speak these words, he lived them, traveling all over for most of his 95 years, in search of great opportunities. In his early twenties, Templeton was a Rhodes scholar. This opportunity gave him the chance to tour throughout much of Europe and planted some of the earliest seeds of his views on global investing.

John Templeton

> John Templeton’s investment style did not fit neatly into a style box. He often talked about searching for bargains, which would indicate a value mindset. However, he called his original and most famous fund the Templeton Growth Fund, with an emphasis not on buying at a discount, as under-value investing, but rather investing in a company’s potential.

> Templeton was one of the early proponents of what is known today as socially responsible investing: That is investing in a way that
is consistent with personal beliefs. Templeton avoided stocks that operated in the alcohol, tobacco, and gambling industries.

American Depository Receipt

> A global fund refers to one that invests anywhere in the world. By comparison, an international fund is one that invests only outside your home country.

> In the United States, a particular type of security, called an American Depository Receipt or ADR, allows you to buy many foreign stocks easily.

○ ADRs basically work like this. JP Morgan or Bank of New York—the two largest players in the space—buy Sony shares on the Nikkei stock exchange. They put the equivalent of a U.S. dollar wrapper around this block of Sony stock, such that it is priced in U.S. dollars, pays dividends in U.S. dollars, and is listed to trade on an American stock exchange.

○ ADRs are negotiable certificates that represent an interest in the shares of a non-U.S. company, are deposited with a U.S. bank, and trade on the major U.S. stock exchanges. You trade it just as you trade IBM in your brokerage account.

> The Sony ADR tends to closely track the price of Sony stock in Japan, adjusted for currency differences. If any difference gets too wide, short-term traders, known as arbitrageurs, make the discrepancy go away. They buy the cheap security and sell or, more accurately, sell short its more expensive equivalent.

○ Selling short is a way of making money if a security falls in price. The typical investor first buys and then sells. Selling short involves the same transaction but in the reverse order: The stock is sold first and purchased later—hopefully at a lower price. If you sold the stock short for $50, and then bought it back later for $40, you made a gross profit of $10.
The Rise of the Global Economy

> U.S. stocks account for only about half of the value of global stock markets. Many products that we know and love are made by foreign companies. Nestle is a Swiss company. Novartis, another Swiss enterprise, is one of the largest pharmaceutical firms in the world. Toyota is a Japanese automaker. Daimler, the owner of Mercedes Benz, is a German company. All of these firms have ADRs that trade on American stock exchanges.

> By some estimates, China’s economy will be twice as big as that of the United States by 2050. That is, China will be as big as the United States and the European Union combined. Thus, investing only in the United States might seem a bit short-sighted.

> Wider selection is perhaps the most important benefit of international investing. But the increased diversification that results from international investing can also produce the extremely important benefit of lowering the overall risk of your portfolio because local economies around the world don’t move in complete sync.

> Of course, international investing has its share of risks, too. Perhaps the most obvious is currency risk. Most of Alibaba’s profits are from China. If China’s currency plunges versus the
dollar, its profits will be lower for U.S.-based investors, potentially hurting the price of Alibaba on U.S. stock exchanges. The reverse could also be true.

> Some countries place capital controls on foreign investment, restricting the ability to move money into or out of the country. A worst-case scenario is a country expropriating or nationalizing foreign assets, but most countries are fairly stable and tend to respect foreign property rights, and the potential benefits of international investment outweigh the risks.

> Even so, most people suffer from what behavioral economists call the home country bias. Investors typically put roughly 90% of their investible assets in their home country. Some financial planners suggest placing a significant percentage of investible assets abroad.

Templeton Background

> John Templeton was born in Winchester, Tennessee, in 1912. Following in his brother’s footsteps, he entered Yale in 1930, during The Great Depression. Shortly after, Templeton’s father told him he could no longer help to pay for his education, forcing the young man to work to supplement the two scholarships that defrayed his tuition. Templeton graduated near the top of his class and went on to win a Rhodes scholarship to study at Oxford.

> In 1936, he and a friend spent 7 months traveling to 24 different countries. Templeton knew he wanted to go into the investment business, and his education and travel provided him with a wealth of experiences that would ultimately be useful to him.

> Although in later years he would avoid taking on debt, in 1939 he borrowed money to buy 100 shares in each of 104 companies that were selling at $1 a share or less (including 34 companies that were in bankruptcy). Only 4 turned out to be worthless, and he turned large profits on the others when U.S. industry rebounded.
as a result of World War II. His roughly $10,000 initial investment turned into about $40,000 4 years later.

> In 1940 he purchased an investment firm that would become known as Templeton, Dobbrow & Vance and called himself an investment counselor. Templeton quickly realized that the economics of running a mutual fund were better than running an investment advisory firm; in 1954, he set up the Templeton Growth Fund and, in 1962, sold his stake in the traditional investment counseling business.

> The mutual fund industry grew rapidly during the 1950s, and the Templeton Growth Fund expanded into an entire family of funds. With so many funds, usually at least one would be performing well. Templeton relocated to the Bahamas in the early 1960s, renouncing his American citizenship, and felt that the solitude of living there provided him with a competitive edge when picking stocks.

### Templeton’s Investing Philosophy

> Templeton felt that the best performance is produced by a person, not a committee. Committees have a tendency to focus their views similar to a consensus, which Templeton believed would not result in market beating performance. At worst, it can result in groupthink, wherein a number of professionals working together and trying to minimize conflict make an irrational or dysfunctional, decision.

> As an investment advisor, Templeton followed what’s called the Yale method of asset allocation, a strategy of mean reversion or rebalancing by trimming winning asset classes and adding to underperforming asset classes. The Yale method that Templeton used is different from what is known today as the Yale Model employed by Yale University’s endowment.

> Templeton once said, “For all long-term investors, there is only one objective. Maximize total return after taxes.” This is an important point: Taxes are often the largest transaction cost for
most investors. One way Templeton tried to reduce taxes was by holding his investments for the long term—about 4 years, representing investor turnover of about 25% a year—compared to an average holding period of about one year—100% turnover—for most actively managed stock funds today.

> Templeton generally avoided stocks yielding the highest dividends because those companies often had problems, putting the dividend at risk of being cut. He preferred dividend growth over the absolute level of the dividend itself, and he thought stocks that paid no dividends had more upside potential. This view differs from that of Graham and other traditional value investors.

**Templeton Preferences for Foreign Investment**

> Templeton preferred to invest in countries that exhibit the following characteristics:

○ Less government ownership. State-owned enterprises might have an advantage against stockholder-owned firms if the government makes the rules.

○ Less government regulation. He believed strongly in the efficiency of the free market system.

○ Less quarrelsome unions. Unions might be less efficient than the free market.

○ Lower taxes. They encourage investment, which should ultimately lead to growth.

○ Firms with higher research and development budgets.

○ The ethic of the people is to be honest and reliable. Investing in a stock is the equivalent of trusting the firm with your money. Corruption results in inefficient markets.
○ The people are farsighted rather than short-sighted. Farsighted people often have better long-term results.

○ Citizens exhibit higher rate of savings. Savings often find their way into the stock market.

**Conclusion**

> John Templeton changed the world of investing forever. He was the person likely most responsible for persuading many of us to invest on a global basis. He was also one of the earliest practitioners of socially responsible investing. He had an investment record of outperformance for more than 50 years. In this respect, perhaps only Warren Buffett can compare.

> Templeton demonstrated that investors with a long-term focus don’t have to listen to the day-to-day noise that emanates from Wall Street. He was the epitome of a flexible investor, making money with value stocks, growth stocks, domestic stocks, and international stocks. He had the temperament to remain optimistic when it looked to others that the sky was falling.

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**Suggested Reading**

Davis and Nairn, *Templeton’s Way with Money.*

Proctor, *The Templeton Touch.*

**Questions to Consider**

1. How would you describe the investment strategy of John Templeton?

2. What are some of the advantages of owning international investments?
Studies by Dreman and others have found that professional research analysts frequently fall prey to what is now known as optimism bias. They tend to be too optimistic about a company’s prospects while failing to take into account what can go wrong, such as failure to execute or increasing competition. Dreman also came to believe that political and financial crises caused investors to sell stocks too hastily—what he considers is precisely the wrong reaction. Dreman advises buying during a panic, and not selling.

The Making of a Contrarian

- David Dreman’s father, a commodities trader who operated a small brokerage firm, often told David that brokerage firms published flawed and incorrect research, possibly planting the seed for Dreman to become a wealthy and well-regarded contrarian—an investor who goes against the crowd.

- As a contrarian, Dreman bought tobacco stocks after the out-of-favor industry agreed to pay the U.S. government $206 billion across 25 years. The agreement settled a series of lawsuits from the damage that tobacco products cause consumers and related
health care costs incurred by the government. Dreman believed that people wouldn’t stop smoking, and the industry’s legal liability was now fixed at a finite (and affordable) cost.

**Investor Psychology**

- Security prices rarely move in a straight line. Instead, they may swing wildly because of the instability of market events and human emotions. In part, that’s because fear and greed are inextricable expressions of human nature, and human emotions are closely tied to what is known as bull and bear market behavior.
  - Bulls fight with their horns—moving upward—signifying the market rising, usually at least 20% from a bottom. Bears fight with their claws—moving downward—representing the market falling, usually at least 20% from a peak. A market correction occurs when stock prices retreat about 10%.

- Over a recent 20-year period, the average investor returned 2.5% a year, compared with 6% annual returns for bonds and 10% gains for stocks, according to a report J. P. Morgan and the research firm DALBAR. Two decades’ worth of data demonstrate that the average investor is beaten by the market every single year. The reason, stated plainly, is that the typical investor chases performance.

- If you look at individual stocks, you will periodically find examples of extreme price movements that can be explained principally by crowd psychology—sometimes leading to bubbles and busts—and not necessarily from any rational movements in the securities’ intrinsic value.

**Behavioral Finance**

- What if there were a way to profit from the mistakes of others? In the emerging field of behavioral finance—the name that economists give to market psychology—learning how to profit
from the fallibilities of others is a primary objective. Another is to be more aware of one’s own failings and to limit them going forward.

> Few investors have done more to advance the field of behavioral finance than David Dreman, who has written 5 books on the topic and is the money manager at his own firm, Dreman Value Management. Dreman is also a cofounder of the respected *Journal of Behavioral Finance*, and for decades he’s written an investment column for *Forbes* magazine—appropriately titled “The Contrarian.”
The list of mistakes that investors seem to make regularly is long. One of the most common biases is the disposition effect. It means that typical investors hold onto losing investments long after they should: They want to at least break even, and they may feel that a paper loss is not the same as a realized loss.

- The flipside is that many investors sell their winning investments too soon. Imagine owning a young Microsoft and selling after a 50% gain. You would have missed out on a 10-fold gain or more. Microsoft had its initial public offering on March 13, 1986, at a price of $21 a share. The stock has split something like 9 times and gone up more than 68,000% since.

- One way to limit the impact of the disposition effect is to review certain fundamental measures of performance that may explain why a stock goes up or down—or be about to. If the fundamentals have changed for the worse, maybe you should consider selling.

Investors tend to overreact to information. They often place more weight on what has happened recently and less on what happened in the more distant past. Mathematically, they weight things in a nonlinear manner. This behavior helps explain why many successful investors are contrarian in their outlook and strategy. They are willing to go against the grain and buy out-of-favor investments if they see fundamental value underneath the bad news.

Investors also tend to suffer from optimism bias. They believe they are better investors than they actually are. For example, investors tend to underestimate the role of competition on their investments. They also tend to trade too much—acting on information that is already widely known and unlikely to add much value.

Another typical mistake is representativeness bias. Investors may confuse a good company with a good investment. It’s easy to say what a good company is. It’s one that consistently increases sales...
and profits. Saying it is a good investment is another story. A good investment goes up more than the market on a risk-adjusted basis.

> Most people are stubborn in their investment approaches. Once they’ve made up their minds about an investment, they tend to agree with information that supports their views and ignore information that conflicts with them. Economists call this behavior confirmation bias.

> Studies find that the average investor feels that losing $1 hurts twice as much as gaining $1 helps them. Economists call this weighting the value of gains and losses function. The implication is that investors really hate losses and should hold well-diversified portfolios to reduce risk. It also suggests why, as humans, we have a proclivity to lean toward “star” stocks that are expensive by almost any valuation metric. Investors tend to fear value stocks because they have problems. They extrapolate into the future that the current good or bad news will continue.

**Dreman Strategy**

> Some famous investors used price-trend analysis to time individual investments and the market. In contrast, David Dreman focuses on company fundamentals, such as valuation levels and industry standing, as well as on how other investors perceive the company’s stock.

> Nowadays a ton of information is available to consider: financial statements, analysts’ reports, press articles, bulletin board fodder, and so forth. We’ve all heard of the term information overload. Dreman says investors should respect the difficulty of working with a mass of undigested information because few can use it all successfully.

> Rather, he prefers the expression “in-depth profits”—knowing about a smaller number of companies in great detail: their product lineup, their ability to fend off competition, and their management
team’s skill. When you are faced with too much information on a single company, focus most of your attention on the factors that drive sales, earnings, and profit margins.

> With regard to overcoming the tendency to harbor investment biases—most specifically, the optimism bias—and to make recurring investment mistakes, Dreman recommends making downward adjustments to analysts’ earnings forecasts for a company. That is, if the analysts’ consensus estimate for Coca-Cola’s earnings is $2 a share, would you still want to buy the stock if it earned only $1.50?

> Because he is a contrarian, Dreman thinks that stocks everyone loves are more likely to run into problems: new competition, poor execution, or complacency. Conversely, if everyone hates a stock, maybe the firm can fix its problems. If it’s a bad business, maybe some of its competitors will be leaving, gradually turning the economics from unfavorable to favorable for the survivors. Still, Dreman cautions that market reappraisals of favored and out-of-favor stocks tend to occur at a glacial pace. Thus, for a contrarian, an important personal characteristic is patience.

> As for the qualities that Dreman looks for in companies to invest in, he likes to buy solid or quality companies with high dividends and low price-to-earnings ratios, price-to-cash flow, and/or price-to-book value—at least 30% less than the market as a whole.

> No uniform definition exists to describe a quality company, but it usually has several characteristics: It’s likely to have been in business for a while, to be profitable, to pay a dividend at least 0.5% higher than the average for the market as a whole and with a history of rising payouts, and to have strong management.

> Dreman prefers to hold a more concentrated portfolio than the typical mutual fund or index fund. He advises investing equally in 20 to 30 stocks, diversified among 15 or more industries. In his
opinion, this strategy balances diversification with his ability to follow the companies in detail.

> While taking losses sometimes is unavoidable, you should also know when to take your winnings. The best poker players don’t stay at the table until their luck runs out. Dreman offers some advice on when to sell.

○ He recommends selling a stock when its P/E ratio (or other contrarian indicator) approaches that of the overall market, regardless of how favorable its prospects may appear, replacing it with another contrarian stock. Dreman’s approach is always to be a disciplined value investor.

> One of the largest firms that tries to systematically capitalize on investor mistakes is LSV Asset Management, based in Chicago, with more than $80 billion in assets under management. The principals state that the fundamental premise on which LSV’s investment philosophy is based “is that superior long-term results can be achieved by systematically exploiting the judgmental biases and behavioral weaknesses that influence the decisions of many investors…”

> Another investment firm to rely on behavioral finance as a core component of its investment strategy is Fuller and Thaler in California’s Silicon Valley with about $5 billion under management. The firm is mid-sized but maintains important investment advisory relationships with much larger partners. Its founders are so committed to the ideas of behavioral finance that they’ve registered the trademark: The Behavioral Edge.

> People have known about the impact of market psychology on security prices for a long time. For example, the economist John Maynard Keynes once described the markets as being moved by animal spirits and not by reason. But over the past few decades, the field of behavioral finance has made great strides in
documenting the mistakes of investors. But not all investors make the same mistakes.

> David Dreman recognized that being a contrarian was the best way for him to make money. But not everyone has the temperament to be a contrarian. One of the worst feelings is to be wrong and alone. If you’re wrong picking a stock that everyone loves, you are unlikely to get fired—even if that stock comes crashing down.

Suggested Readings

Dreman, *Contrarian Investment Strategies.*
———, *Psychology and the Stock Market.*

Questions to Consider

1. How would you describe the investment strategy of David Dreman?

2. What investment biases do you think you are most susceptible to and how do you plan to correct them?
Peter Lynch: Invest in What You Know

Peter Lynch managed Fidelity Investments’ Magellan Fund from 1977 to 1990. During his 13-year tenure, a $10,000 stake in the fund would have grown to $280,000. Over the same period, the S&Ps 500 stock index roughly tripled, increasing 214%. Under Lynch, the Magellan fund never lost money over a calendar year, and it beat the S&P 500 11 out of 13 years. During that time, the size of the portfolio he managed grew from $18 million to $14 billion. Lynch was once the most successful mutual fund manager in the world, and then he retired at his peak.

The Investment Universe

> A mutual fund is an investment managed for the mutual benefit of its shareholders. A mutual fund such as Magellan offers the same portfolio of investments for all its shareholders. Large investors, or institutions, usually belong to a class of shares paying lower fees than small investors do. These fees may include management fees, marketing fees, and administration fees.

> The expense ratio is the “all in” number that expresses the fees you pay as a percentage of your overall investment.
Research analysts often break the investment universe into different categories they call style boxes. The main distinctions are between growth, value, large cap, and small cap.

- Growth firms trade at above-average valuations relative to the market as a whole. For example, their price to earnings or price to book ratios may be higher than the S&P 500’s. By comparison, value firms trade at below-average multiples.

- Growth investors are often trying to find rapidly growing smaller firms that have the potential to become large firms like the next Amazon. In contrast, value investors search for stocks trading at a low price relative to the company’s earnings or cash flow or paying an above-average dividend.

- Value stocks are companies that typically are growing sales and earnings more slowly than growth firms. They also might
be going through some problems, explaining why they may be trading at below-average valuations.

- Small-cap companies are valued at less than $1 billion. By comparison, large cap firms are those with a market capitalization—or market price times total shares outstanding—of $1 billion or more.

Lynch’s Background

- Lynch worked as a caddy to help support his family after his father’s death. He found that it paid better than delivering newspapers, and being a caddy provided him with his first real exposure to the stock market: Businessmen, doctors, and lawyers naturally discussed the stock market while they were out on the golf course.

- He joined Fidelity Investments in 1965 and became a full-time analyst in 1969, covering the metals and chemicals industries. In between, Lynch got his M.B.A. at the University of Pennsylvania’s Wharton School and served in the Army for 2 years before launching his storied career at Fidelity. Lynch eventually headed Fidelity’s research department before getting the chance to run Magellan.

Research Is Knowledge

- Lynch gets upset when people say his strategy was to “invest in what you know,” as if that’s all there is to it. Research is essential. Lynch would follow up on his own common sense and instincts with rigorous fundamental analysis. That meant looking at a company’s financials, talking to management, and talking to competitors in the industry.

- Listen to the quarterly earnings conference calls that firms host for analysts and investors.
○ Listen to or view public presentations at conferences and elsewhere to get an impression of management’s credibility over time.

○ Find a recording of a firm’s conference call on the investor relations portion of its website. You frequently can find earnings call transcripts and other information.

○ Try calling a firm’s investor relations department. These professionals tend to be more accessible than the company’s CEO or CFO.

○ Buy a single share of a company’s stock, and attend its annual shareholders meetings. Most firms permit shareholders to ask questions at these annual meetings.

> Lynch rarely invested in a firm with a lot of debt. One of his maxims was, “Companies that have no debt cannot go bankrupt.” Of course, bankruptcy is the worst-case investment scenario for the buyer of a stock, since the stock price almost always goes to zero. A few ways of assessing the bankruptcy risk of a firm include the following:

○ Look at a company’s credit rating. Standard and Poor, Moody’s, Fitch, and other credit-rating services evaluate the debt of most public companies. A bond rated below BBB– is considered high-yield or junk. If you are a stock investor, you’ll want to have a high level of conviction before investing in a company with a junk credit rating.

○ Look at a number of ratios that measure creditworthiness: the debt to equity, debt to assets, and debt to income ratios. You can find most of these ratios at popular financial websites.

> Although Lynch didn’t like firms with a lot of debt, there were some exceptions. One of his biggest winners was buying Chrysler stock in 1982, as the automotive company teetered on the edge of
bankruptcy. The stock was trading at $2 a share and it was losing money, but Lynch liked the product line.

- Chrysler invented the minivan, a huge hit. He was a fan of its CEO, Lee Iacocca, and he thought the rumors of Chrysler’s bankruptcy were greatly exaggerated, especially since the company had just sold its military tank division to General Dynamics, for $1 billion in cash.

- The U.S. economy was just then emerging from a deep recession so he thought the auto industry was headed for a cyclical upturn. Lynch turned out to be right, as the stock eventually went up more than 10-fold. That’s what Lynch calls a tenbagger.

> Lynch made money across the investment universe. When Magellan was small, he could count on small-cap stocks to help deliver outsized performance. Small-cap companies are valued at less than $1 billion. By comparison, large cap firms are those with a market capitalization—or market price times total shares outstanding—of $1 billion or more.

> Small stocks historically deliver higher returns than large stocks because they are riskier, but also because they are followed less intensively by Wall Street. You are more likely to uncover information on small cap firms that is not yet widely known by the market.

> Yet Lynch’s superior performance continued even when Magellan ballooned in size, and he tilted towards larger firms: companies like IBM, Ford, Merck, and General Electric. Starting in the mid-1980s, Lynch also invested about 10% to 20% of Magellan’s assets in international stocks, names like Unilever, Volvo, and Royal Dutch Shell.

> Part of Peter Lynch’s mantra of investing in what you know is that you probably have some unique insights into the industry that you work in, or worked in. He says, “Your investor’s edge is not
something you can get from Wall Street experts. It is something you already have. You can outperform the experts if you use your edge by investing in companies or industries you already understand.”

**Buying in Bulk**

- Lynch had a portfolio liked to buy baskets of companies in an entire industry. His logic was that when you are looking at small firms or a new industry, you might not know which will emerge as winners. Therefore, if you are right on the industry at large—and buy a basket of its stocks—then the winners will go up in multiples; if you avoid borrowing, you won’t lose more than 100% of your investment in the failures.

- Peter Lynch retired before the Internet boom, but as an example of investing in baskets of stocks, think about all the search engines that once existed: Alta Vista, Lycos, Infoseek, Yahoo!, and others. The eventual winner turned out to be Google, which came to be valued in the hundreds of billions of dollars. But if you’d bought a basket of all the leading candidates at the time, you would have wound up ahead even if all the other search engines went to zero.

- Lynch generally avoided hot stocks in hot industries, preferring companies that appeared to be dull, mundane, or out of favor, or which hadn’t caught the fancy of Wall Street. He thought they shared several characteristics:
  - They tended to be low-cost operators with penny-pinching managers in the executive suite.
  - They avoided going into debt.
  - They rejected the corporate caste system and didn’t pit white-collar workers against blue-collar workers.
  - Their workers tended to be well paid, with stakes in the companies’ future.
> These kinds of companies seemed to find niches and grow faster than average.

> Although not everyone has the resources that Peter Lynch had at Fidelity, he suggested a number of tips that the rest of us can use.

○ He looked for companies that consistently bought back their own shares. If a company buys back its own shares, it tells the market that it thinks its stock is undervalued.

○ A company buyback also tends to keep away short sellers who are betting the stock price will fall. Many companies also buy back stock to offset the shares given to employees as compensation.

> Look for companies that started out with little or no institutional ownership. If the amount of institutional ownership is less than 50% of the total number of shares outstanding, the institutions haven’t piled in yet. Once the institutions pile in, the stock price can take off.

> Lynch viewed insider buying by management as a positive sign. Corporate insiders should know more about the firm than almost anyone else. Most corporate directors get the bulk of their compensation from their company’s stock. For them to buy on top of that sends a very strong signal.

> On the other hand, insiders sell for various reasons: to pay taxes or diversify their portfolios, for example. But if corporate insiders sell a large portion of their holdings, it may be cause for concern.

> If you are getting nervous about a rising stock price, hold at least a portion of the stock if the business is still solid, even if you think it might be overvalued. Lynch believed in investing in companies, not in the stock market. He tried to ignore short-term fluctuations, viewing market declines as an opportunity to buy stock in
companies he liked. In the long term, there is a 100% correlation between the success of a company and the success of its stock.

> Even so, you can’t simply invest in what you know. Successful investing requires research. Before buying a stock, look at a company’s financials, its competitive position in the industry, and its management. One of his rules is, “Never invest in anything that you can’t illustrate with a crayon.”

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**Suggested Reading**

Lynch, with Rothchild, *Beating the Street.*

———, *One Up On Wall Street.*

**Questions to Consider**

1. How would you describe the investment strategy of Peter Lynch?

2. Which industries do you think you have a core competence or competitive advantage in?
The global bond market is more than twice as large as the stock market. It also plays a more central role in the lives of most people. The mortgage on your home, your student loan, your car loan are all tied to the bond market. Federal, state, and local governments finance themselves through the bond market. The assets in Social Security are tied to it, and the global economy almost melted down in 2008 because of the bond market—not the stock market.

Gross and Gundlach

> Bill Gross was crowned a “bond king” because of his storied career with the Pacific Investment Management Company, better known as PIMCO. That is, until their well-publicized breakup. Gross managed the firm’s huge Total Return bond fund, which peaked with almost $300 billion in assets under management. In the more than 25 years that Gross ran the fund, it outperformed its benchmark by about 2% a year. That’s a big deal in the bond world—especially with a fund so large.

> Jeff Gundlach earned his stripes as the top bond manager at Trust Company of the West, or TCW. Like Gross, Gundlach ultimately
had a contentious departure. Under Gundlach, TCW’s Total Return Bond Fund finished in the top 2% of all funds in its class for the 10 years before he left. Less than 7 years after starting over at his own firm, he had more than $100 billion in assets under management.

> Bill Gross and Jeff Gundlach share a focus on 3- to 5-year investment horizons and top-down analyses that take the big picture of the economy into account. Bill Gross is adept at investing worldwide, while Jeff Gundlach has a special expertise in U.S. mortgage bonds and in relative-value analysis.

Bonds and Risks

> A bond is like an IOU backed by legal rights. The issuing party, typically a company or government entity, usually offers to pay interest, known as the coupon payment, in order to borrow money from investors. Eventually, it returns the money borrowed—known as the face, par, or principal value—along with interest. And since the amount and timing of the cash flows on bonds are usually known, they are called fixed-income securities. When investing in bonds, you should be aware of several important risks.

> Interest-rate risk. When interest rates go up, traditional bonds fall in value because the bond is viewed as riskier and is valued less. When interest rates fall, traditional bonds usually rise in value because the risk is perceived to be lower.

> Reinvestment rate risk. When rates rise, the coupons and maturing face value or bond principal can be reinvested at higher rates in newer securities, drawing investor interest away from the older instrument.

> Default risk. If a bond defaults, it may be forced into bankruptcy, and the bondholders may seize the assets of the issuer—often after a long and protracted bankruptcy court battle.
Liquidity risk. A liquid asset is one that can be sold quickly, and at fair market value. A U.S. Treasury Bill is very liquid. Your house is not. During times of market distress, such as the Great Recession in 2008, illiquid assets often take a big hit. In the bond market, they tend to be bonds that have less trading volume; bonds with low credit ratings; emerging markets bonds; and bonds with wide bid-ask spreads—the difference in price between when you buy and when you sell.

Bill Gross

Bill Gross was born April 13, 1944, in Middletown, Ohio. He wanted to go to college on the East Coast, and Duke offered him an academic scholarship. Gross majored in psychology and always had a knack for numbers. While in school, he was in a car accident. During his recovery, he read a famous gambling book titled *Beat the Dealer*.

After graduation, he enlisted in the Navy, but first he went to Las Vegas for 4 months, where he made a living as a gambler, using the gaming strategy he’d read about. Gross would use many concepts from gambling, such as developing strategies for making decisions with incomplete information, in his future investment activities.

After the Navy, Gross went on for his M.B.A. Although he wanted to be a stock trader, he joined the Pacific Mutual Life Insurance Company as a credit analyst. A short time later, Pacific Mutual created a new firm to focus on mutual funds: Pacific Investment Management Company, or PIMCO. Gross joined the new unit and eventually took it over with a couple of business partners.

Gross’s Investment Strategy

Gross believes that successful investment over the long run, whether in bonds or in equities, depends on developing a long-term outlook and acquiring the right mix of securities within an asset class. In addition, he believes that 3- to 5-year forecast
horizons force an investor to avoid the near-term fluctuations that lead to panic and bad investment decisions. This focus makes him a top-down investor.

The expected return on a bond over its term should be pretty close to its yield to maturity—that is, the return from the coupon payment and the capital gain or loss on the instrument, together known as the bond’s total return. Gross focuses on yield-to-call estimates, as opposed to yield-to-maturity calculations, when estimating the most probable total return on a bond held until maturity.

In the search for yield, Gross also suggests exploring international bonds, particularly in emerging nations. They may also provide additional diversification. But a word of caution: International bonds also have currency risk. If an American investor invests in a foreign bond the foreign currency falls versus the dollar over your investment horizon, you may lose money, on a total return basis, when you try to convert your investment back to U.S. dollars.

In short, Gross’s impressive record in the bond markets has not been achieved with a single strategy but rather by being flexible, global, and long-term oriented.

In 2000, the German insurance giant, Allianz AG paid $3.5 billion to acquire 70% of PIMCO, which had grown to be the largest bond shop in the world. But Gross butted heads with the other members of PIMCO’s management team. Compounding the infighting was the lagging performance of Gross’s main investment vehicle, the PIMCO Total Return Fund.

Jeff Gundlach

Jeffrey Gundlach was born October 30, 1959, and grew up in a middle-class family near Buffalo. He was a strong student with near-perfect SAT scores, and he was admitted to Dartmouth College, where he majored in math and philosophy. Later, he entered Yale’s Ph.D. program in applied math.
Two years later, Gundlach disagreed with his advisor on the topic of his Ph.D. dissertation, dropped out of Yale, and headed to Los Angeles to be a drummer in a rock band. After a couple of years, he found himself broke and looking for a job when he saw a TV show that counted down the top paying jobs in the world and listed investment banker as number 1. Gundlach decided that he would be an investment banker.

Gundlach didn’t know the difference between an investment banker—who focuses on mergers and acquisitions and IPOs—and investment managers, who manage money on behalf of clients. But TCW hired him, thinking that his math background would provide a good foundation for him in the bond market. Gundlach was a quick study and thrived at TCW. He spent 24 years at the firm before being fired in 2009.

His dispute was with TCW’s management and the French parent company, Société Generale. Among other things, the firm accused Gundlach of attempting to steal confidential client and trading information that he could use to launch his own firm.

Gundlach went on to found Doubleline Capital with about 45 former TCW colleagues who’d helped him run his funds at TCW. But, before his departure, Gundlach amassed one of the best bond records in the industry. Morningstar nominated him as Fixed Income Manager of the Decade. He lost out to Bill Gross.

Gundlach Investing Strategy

Gundlach believes that if you buy bonds during periods of illiquidity and drops in price, you are likely to profit after the fear subsides and normalized market-levels return. Gundlach has made money investing in all sorts of bonds and other financial instruments. But he is perhaps best known for his investments in mortgage-backed securities.
> Fannie Mae and Freddie Mac are government-sponsored entities backed by the credit rating of the U.S. government and designed to facilitate the functioning of the mortgage market. In 1981, Fannie Mae issued the first mortgage-backed security. Think of it as a bond in which the cash flows are a group of individual mortgage payments rolled into a single security.

> Usually they trade at close to AAA or AAA- ratings while providing a slightly higher yield than U.S. Treasury securities. Gundlach specializes in buying securities that appear to give a higher return than their credit risk might indicate.

> Like Gross, Gundlach usually starts with a top-down view and sets a macroeconomic horizon of about 3 years when he enters a position. He is occasionally willing to make shorter term trades
with horizons of less than a year, and he gives careful thought to how he enters and exits positions. When Gundlach says that his firm is a liquidity provider, he means is that he’s a reliable buyer of certain bond instruments when the sellers have to sell.

> When conducting his top-down analysis, Gundlach looks at a few variables. One is the yield curve—a graph of the relationship between time to maturity and yield to maturity. The yield curve typically slopes upward, with long-term interest rates higher than short-term rates.

> Gundlach also looks at what is happening in the economy. Gross domestic product growth might be a useful measure of how the economy is doing as a whole. But he also looks at the credit cycle, which refers to bank lending and customer-default rates. Historically, as the economy approaches recession, credit gets tight and defaults go up.

> This top-down analysis—taking into account the general state of the economy, liquidity in the debt market, and borrower health—gives Gundlach a sense of the credit and interest rate risk in his portfolio.

> Then Gundlach and his team turn to a bottom-up analysis for bonds, which might include looking at loan-level details and specific geographic areas. They check relative value among different credit sectors in fixed-income, at horizons of about 3 years and do a rich/cheap analysis on the various bond sectors, including emerging and foreign markets.

> Gundlach has one of the best batting averages in the investment world. He claims to be right about 70% of the time, which—if true—is phenomenal in a business where being right just over half of the time would make you an all-star.
Suggested Reading

Laing, “The King of Bonds.”

Questions to Consider

1. How would you describe the investment strategy of Bill Gross and Jeff Gundlach?

2. How does bond investing differ from stock investing?
Why should we care about sovereign wealth funds? The answer is because they control more financial assets than hedge funds and private equity funds combined, amounting to more than $7 trillion. Many governments view these funds strategically to help support their own political and economic agendas. As sovereign wealth funds grow in size and importance, they have come to play larger roles both in their own countries’ affairs and in market battles between traditional, independent companies and state-owned and -controlled companies.

Sovereign Wealth Funds

> On February 27, 1981, the deputy prime minister of Singapore—Dr. Goh Keng Swee—announced a plan to establish a government-owned investment corporation for the benefit of the population of the island city-state. Its source of funds would be foreign-exchange reserves—reserves beyond what the central bank needed to manage the country’s exchange rate. Its objective: capital appreciation.

> Today, dozens of countries, most of them commodity rich, are pouring billions and trillions of dollars into government-run funds
designed to benefit their domestic economies and populations while unveiling new and sometimes conflicting forces in world markets.

> Sovereign wealth funds have become increasingly popular and powerful on the one hand, and potentially controversial on the other. However, it’s important to underscore the fundamental tension between the public good that such funds were intended for and potential pitfalls, such as state interests over private needs and the designs of managed markets over free ones.

> The U.S. Treasury Department defines a sovereign wealth fund as “A Government Investment Vehicle which is funded by foreign exchange assets and which manages those assets separately from the official reserves of the monetary authorities, (the Central Bank and reserve-related functions of the Finance Ministry).”

> The distinction is intended to clarify the difference between official reserves managed by a country’s central bank, with short-term horizons, focused on liquidity and security, and the longer horizons associated with, for example, national pension systems.

> Three main drivers behind the creation and growth of sovereign wealth funds are balance of trade, economic stability, and the desire of sovereign nations to diversify their assets.

> The International Monetary Fund further classifies sovereign wealth funds in 5 categories, according to their form and function:

  ○ Stabilization funds are formed to insulate a state budget and economy from commodity price volatility and external shocks. These investments sometimes are designed to move in the direction opposite the commodity prices against which a government wishes to insulate its economy.

  ○ Savings funds are designed to transform nonrenewable assets into financial assets that can be shared across generations. Examples include the Abu Dhabi Investment Authority.
These portfolios are invested primarily in equities and other growth investments.

- Development funds allocate state resources to high-priority socioeconomic projects such as infrastructure.

- Pension reserve funds, as in Australia, Ireland, and New Zealand, invest in equities and other investments to offset rising retirement liabilities.

- Reserve Investment Corporations are more complex funds designed to earn higher returns on foreign reserves or to reduce the negative carrying costs of holding them. They may invest in equities and alternative investments to achieve higher returns.

> Axiomatic in the United States and the United Kingdom is that the goal of an investment fund is to appreciate in value and maximize shareholder wealth. In other countries, other stakeholders also
receive important consideration, including customers, employees, the local community, and the government itself.

> Many countries run budget surpluses that can come from taking in more in tax receipts and other revenues than what goes out in the form government spending or from trade surpluses. An international trade transaction—for example, the United States buys oil from Saudi Arabia—involves several components.

○ The balance of payments includes all payments and obligations to foreigners balanced against all payments and obligations received from foreigners. The balance of payments must balance.

○ If one country runs a persistent trade deficit with another, something must happen on the other side of the international ledger to square it away. The typical transaction of the country with the trade surplus is to invest trade proceeds in securities or some other asset. Thus a trade deficit is usually offset by a positive financial account—including holdings such as foreign investments in stocks, bonds, commodities and real estate—or capital account balance including holdings such as foreign direct investment, which can include physical investments in equipment, buildings, and factories.

○ The purchase of Saudi Arabian oil thus may be balanced by a purchase of U.S. Treasury securities.

The Singapore Story

> Though it has little in the way of natural resources, Singapore’s economy is diverse, with a strong position in technology-related firms, financial services, biotechnology, and chemicals.

> Per capita, it ranks among the 10 richest countries in the world; it is one of the few countries with a triple-A credit rating; and it
routinely ranks near the top of surveys as the most pro-business, and least corrupt.

> Singapore’s sovereign wealth fund, conceived and first managed by Dr. Goh, played a key role in its growth from an emerging market to a developed market in a single generation.

> The monetary authority of Singapore is the Central Bank; one of its duties is maintaining the stability of Singapore’s currency, the Singapore dollar. This balancing act can best be achieved with the help of foreign exchange reserves.

○ If the government wanted to support the Singapore dollar, it could sell some of its reserves of euros and Japanese yen to buy its dollars.

○ If it wanted to weaken its currency to make domestic industry more competitive in foreign markets, it would sell its own dollars and buy foreign currencies.

> A brief history of the fund described the idea as “far-sighted, original and bold.” Not only did it foresee that Singapore would have balance of payments surpluses for years to come; it broke with the convention of vesting reserves management solely in the Central Bank, and it conveyed confidence that Singapore would be able to overcome its lack of local expertise in global investment management.

> Goh also saw that Singapore’s persistent trade surplus could be put to better use other than buying low-yielding government securities and gold. Thus, the Government of Singapore Investment Corporation, or GIC, was born.

> The real impact comes from what the country does with the returns on its portfolio. The Singaporean government is permitted by charter to take up to 50% of net investment returns to supplement the government budget. This figure amounts to more than $10 billion a
year, or about 20% of the total budget, used to support the economy and for social purposes such as education and health care.

**Sovereign Wealth Funds in Action**

- Offsetting all the good that well-run sovereign wealth funds are capable of doing for their constituent populations, some concerns remain prominent. In contrast to the relative transparency of public pension funds, sovereign wealth funds are opaque. They often will not show their holdings, and usually provide only a rough estimate of the assets they have under management. Yet nations may have good reason for wanting to keep secret the details of their sovereign wealth funds.

  - For example, other investors might want to use that information against them when betting against a country’s currency, as George Soros did by shorting the British pound sterling in September 1992. Soros made $1 billion by getting that trade right.

  - Five years later, speculators attacked Thailand’s Bhatt currency, causing it to lose 30% against the U.S. dollar. The Thai currency crisis spread to other Asian nations—it became known as the Asian flu—and to Russia, creating turmoil throughout the global financial system.

- Another concern of some Western policymakers is the way sovereign wealth funds could use their assets to support critical or unfriendly agendas. Norway’s sovereign wealth fund, the largest in the world, decided on ethical grounds to divest its ownership of any company that derives more than 30% of its revenues from coal.

- China, in particular, has used state-owned companies and its sovereign wealth fund to acquire rights to natural resources abroad that might be useful to domestic industry and its own population.
Broad concerns about the lack of transparency, potential control of foreign resources, and investment decisions based not entirely on for-profit grounds led several sovereign wealth funds to sign a set of 24 voluntary guidelines known as the Santiago Principles.

The Santiago Principles are partly designed by the International Monetary Fund; signatories include China, Qatar, Singapore, Russia, and the United States. The United States is represented by the state of Alaska Permanent Fund, which derives its endowment mainly from state oil revenue. Notably absent were Norway and Saudi Arabia.

Most large sovereign wealth funds are owned by commodity-oriented countries. Saudi Arabia is a case in point about what happens when their resources, such as oil, run out. Oil accounts for 90% of the country’s tax revenues and 85% of its export earnings.

Because of the ineffectiveness of OPEC and the rise of non-OPEC oil and alternative energy sources, Saudi Arabia has lost pricing power over the global energy markets. A key part of Saudi Arabia’s proposed solution to this problem is to dramatically expand its sovereign wealth fund, the Public Investment Fund.

Saudi Arabia’s sovereign wealth fund has been estimated at about $150 billion, with plans for the fund to increase to $2 trillion or more. The plan for Saudi Arabia’s diversification is spelled out in Vision 2030. The centerpiece is the initial public offering of Saudi Aramco, which would allow the kingdom to monetize at least a portion of its vast energy holdings. Ownership of Saudi Aramco would be transferred to the Fund. The plan calls for roughly 50% of the assets to be invested internally, supporting areas outside the energy sector, like the defense industry, with growth potential. The remaining 50% would be invested outside of Saudi Arabia, with a global focus.

This vision, if realized, raises an issue about the nature of competition as government-related entities play larger roles in...
global markets than in the recent past. Will the playing field be level and how effective can the government be in playing a role in private industry?

Conclusion

> In less than a decade, sovereign wealth funds doubled to more than $7 trillion, substantially enough to be recognized as investment behemoths in the financial markets.

> With size comes influence. From this perspective, sovereign wealth funds might become like to activist hedge funds, but their motives may be different from those of activist hedge funds, whose goal is to maximize the stock price.

> These issues raise the question of how the global economy will evolve. Foreign governments are buying firms outside of their national territories. Yet cross ownership might also encourage nations to work together, taking the global economy to new heights—or to new conflicts.

Suggested Readings

International Working Group of Sovereign Wealth Funds, “Sovereign Wealth Funds.”
Orchard, Safeguarding the Future.

Questions to Consider

1. How would you define a sovereign wealth fund?

2. Why are sovereign wealth funds becoming increasingly important in the global financial landscape?
The term “hedge” in a financial context means to reduce risk. Specifically, a hedge is an investment designed to reduce exposure to price movements by transferring risk. Although no uniformly agreed definition of a hedge fund exists, a good working definition is a private investment vehicle that charges two types of fees: an asset-based fee assessed as a percentage of assets under management and a profit-sharing or incentive fee taken from the fund’s earnings, if any.

A. W. Jones

> The story of Alfred Winslow Jones, the father of the hedge fund industry, hardly suggests he would become one of the most important figures in the history of investment management.

> He graduated from Harvard in 1923 and for the next decade traveled the world as a steamship’s accountant, a member of the U.S. Foreign Service, and an observer in Spain during the Spanish Civil War.

> In the late 1930s, Jones pursued a Ph.D. in sociology at Columbia, and in 1941, he completed his dissertation, which served as the
basis for a textbook on sociology. Some excerpts also came to be published in *Fortune* magazine.

> Jones went on to work for *Fortune* as a writer and editor from 1941 to 1946, and then freelance. One article he wrote in 1949, “The Fashions in Forecasting,” is said to have spurred his interest in setting up his own money-management firm.

**The Birth of the Hedge Fund?**

> That same year, Jones and 4 friends established A. W. Jones & Co. The firm started with $100,000 in capital. Jones put in $40,000, and was named managing partner. A. W. Jones & Co. was organized as a limited partnership rather than a mutual fund and thus was exempt from oversight by the SEC as long as the number of investors it served was limited to 99 or fewer and they were deemed to be affluent.
Most managed investment vehicles—including mutual funds and exchange-traded funds—charge asset-based fees. Actively managed stock funds usually charge about 1% per year. By comparison, index funds and exchange-traded funds charge much less: usually in the neighborhood of 0.1% per year.

Hedge funds typically charge 1% or 2% of assets, plus a percentage of the profits they earn on your investment. The standard profit sharing fee is 20%, but some funds take as much as 50%.

Jones consciously avoided regulation and took 20% of the profits. He also dynamically adjusted the long to short ratio of his fund, meaning that sometimes he would be more long than short, other times more short than long, and other times about neutral between his long and short positions.

These 3 characteristics—limiting regulation, taking 20% or more of the profits and dynamically adjusting the long to short ratio—describe the bulk of hedge funds today.

Hedge funds managers know that they have no idea what the market is going to do, but they have confidence that company A (let’s call it Ford) is better than company B (let’s call it GM). By buying Ford and selling GM short, they essentially remove the market effect on these stocks and keep only the company-specific effects.

Leverage, Carry Trade, and Arbitrage

Small spreads between long and short positions can become large spreads through various strategies that hedge funds employ, like using leverage (or borrowing money) and the carry trade.

Many hedge funds use leverage to increase risk and expected returns. The amount of leverage varies widely by the type of hedge fund, but it can be 30 to 1 or more. More typical is a leverage of 2 to 1 or 3 to 1 in the aftermath of the 2008 financial crisis, when
heavy borrowing from investment and commercial banks and magnified losses destroyed some firms.

> The unit of investment and commercial banks that deals with hedge funds is typically called the prime brokerage unit. The prime brokerage unit wires the money and handles the trading back-office functions when a hedge fund makes a trade. Since the prime brokerage unit is a source of funding or liquidity for hedge funds, especially during times of market distress, the funds have a strong incentive to maintain good relations with their prime brokers.

> Banks are leveraged by their very nature. A local bank is leveraged about 10 to 1. It can lend $9 or $10 for each dollar it has in capital, expanding credit in the economy. Some Wall Street investment banks used to be leveraged at more than 30 to 1 before the financial markets crisis of 2007–2009. After the crisis, Congress passed the Dodd-Frank Act, which reduced the leverage of banks by to a maximum of 15 to 1.

> Still, well-capitalized banks have plenty of leverage to offer hedge funds. From the bank’s perspective, if it lends money to the funds, the fund managers have to pay interest and they are likely to trade more, generating commissions for the bank. These loans are secured by the assets of the fund, so on balance they are pretty safe.

> In the carry trade, an investor seeks not only to borrow money, but to find the cheapest money available. A fund can then invest that borrowed money elsewhere at higher returns.

> Many hedge fund strategies also engage in a type of trade called arbitrage.

  ○ In this trade, you made 5% no matter whether the market went up or down—a strategy that tries to minimize market risk, but you still retain company-specific risk.
Arbitrage extends the law of one price to two different securities—and even entire portfolios of securities—where both sides, the longs (the buyers) and shorts (the sellers) have the same general risk characteristics, but different expected returns. Arbitrage strategies always involve buying the cheaper item and selling short the expensive item.

**A. W. Jones’s Strategy**

If Jones’s investors gave him $10 million in capital and he had $20 million in long investments and $5 million in short investments, the difference between his long and short assets would be a positive $15 million. This represents a net exposure ratio of 1.5 when dividing the positive $15 million investment position against his $10 million in capital provided by investors. In this example, Jones would be bullish on the market, and also leveraged on a gross basis of 2.5 to 1, signifying even greater conviction in his position. If Jones was $20 million short and $5 million long, this would result in a $15 million net short position. And it signifies a net exposure ratio of minus 1.5—and conviction for the bearish case.

Jones dynamically adjusted his long and short exposure as well as his use of leverage regularly. Jones, like most hedge fund managers, tended to be more long than short. Part of the reason is that the market usually trends up. Most equity managers are short about 50 cents for each dollar that they are long.

*Fortune* magazine’s Carol Loomis wrote an article many years ago, “The Jones Nobody Keeps Up With.” This profile, published in April 1966, also provided hedge funds with perhaps their first mainstream attention. It noted that Jones’s partnership returned a 670% profit to investors in the previous 10 years. The best-performing mutual fund over the same period, The Dreyfus Fund, returned 358%.
Fund of Funds

> A. W. Jones wasn’t known for his stock-picking ability per se, but he harvested ideas from a vast network of brokers and other investors, and he offered generous commissions as a way of getting good investment ideas. This flow of ideas was at least one reason for Jones’s strong investment performance.

> Jones stopped running the fund according to its original approach sometime before or around 1984. By that time, the partnership had evolved into what is known as a fund-of-funds structure, which, instead of owning individual security positions, invests in other hedge funds. The fund-of-fund approach has its pros and cons.

> Perhaps the best attribute of a fund of funds is a diversified portfolio. Today, most hedge funds have a minimum investment of $1 million. Unless you’re a really rich person, it would be difficult to own a diversified portfolio of hedge funds.

> In contrast, most funds of funds require a minimum investment of $500,000 or less. The managers of a fund of funds typically also perform substantial research and due diligence on the external hedge fund managers they select. It would be hard for most individuals to replicate this research on their own. Funds of funds sometimes also advertise the ability to get investors into very selective hedge funds of top managers that might be closed to individuals.

> The main disadvantage of a fund-of-fund structure is a second layer of fees. The most common fee structure for a fund of funds is 1% of assets and 10% of profits. So adding this to the common fee structure of the underlying hedge fund—that is 2% of assets and 20% of profits—results in a total fee structure 3% of assets and 30% of profits. It takes a very strong investment performance to overcome all these fees, and hedge funds can be tax inefficient because of the short-term capital gains they produce.
Conclusion

> Today, more than 12,000 hedge funds manage in excess of $3 trillion. Hedge funds have become mainstream, at least for high net worth investors and institutions—including the pension funds of many rank and file workers.

> At the same time, since the financial markets crisis of 2007–2009, the SEC requires greater regulation of hedge funds. U.S. funds that manage more than $100 million must register with the SEC as registered investment advisors. Being a registered investment advisor subjects a firm to inspection and requires periodic reporting of its assets and client base.

> However, the SEC does not impose diversification and leverage limits on hedge funds, as it does for mutual funds and pension funds. In other words, hedge funds can still pretty much do what they want with their investments, as long as it is disclosed in the operating documents sent to their investors.

> Jones had the foresight to realize that many investors disliked the wild gyrations of the stock market that are characteristic of a traditional buy-and-hold investment approach. Jones tempered market volatility by offsetting his long purchase positions with short sale positions, and he realized that he could even profit from a decline in the market if he were net short.

> Jones also added leverage to the equation, an aspect generally prohibited in mutual funds and pension funds except in small amounts. Leverage gives managers the ability to increase the amount of conviction to their investment ideas. And over more than a 30-year period, Jones’s partnership earned positive returns more than 90% of the time.
Suggested Reading

Loomis, “The Jones Nobody Keeps Up With.”
Mallaby, *More Money Than God*.

Questions to Consider

1. How would you describe the investment strategy of A. W. Jones?

2. How would you define a hedge fund?
Carl Icahn made activist investing famous years ago. Daniel Loeb, the founder of Third Point LLC, a hedge fund with $17 billion or so in assets under management, is an activist investor. Bill Ackman is a part of a slightly later generation of activist investors. Activist investors frequently take a large stake in a particular company to get management’s ear—or a seat at the board table. They use their stakes to spur changes to increase the company’s stock price. Their demands might involve changes to corporate strategy or management; a dividend increase, buyback, or outright sale of the company.

Activist Investing 101

> Activist investors get companies to do what they want, first, by talking to them. As you might guess, this tactic doesn’t always generate good results. Other times, the activist may publish a white paper detailing ideas to improve the company. Making these reports public puts pressure on management.

> Sometimes, the activist will issue a takeover offer for a firm that is viewed as mismanaged, or undervalued. As in the corporate raider days, the takeover offer may be financed all or in part with the
target company’s borrowing power, sometimes in the form of junk bonds. In other words, an activist investor might offer to buy some or all of a company’s shares, to be paid for by borrowing against the company’s assets.

- This offer might be at a premium to the current share price, but conditioned on the consent of 50.1% or more of the shareholders. The offer puts pressure on sitting management to improve the stock price, comparable with the offered premium: Many investors would prefer to pocket the short-term in the stock price rather than rely on management’s promises of long-term improvements.

- In some instances, the target firm might pay the activist to go away. This tactic is called Greenmail. The payment comes out of the company treasury, usually at a premium to the current market price. Since typically only the raider or activist gets this premium—and other shareholders do not—the SEC largely outlawed the payment of Greenmail in recent years.

- The most contentious and costly way for an activist investor to pursue changes at a company is by mounting a campaign for board seats through a proxy contest, wherein the activist attempts to persuade other shareholders to vote for the activist’s slate of board candidates. If successful, the new board will be likelier to implement the activist’s strategy. Sometimes, the new board will appoint a CEO handpicked by the activist.

- Some firms defend themselves against hostile takeover bids with a strategy called a poison pill. The firm pledges to issue new shares to existing shareholders at a bargain-basement price with a view toward making the unsolicited takeover more expensive and perhaps less appealing.

- Another defense strategy is to find a different partner—a white knight—friendlier to management. Warren Buffett is often viewed as a white knight because he usually leaves management alone when he buys or invests in a company.
Shark repellent is a defensive strategy that uses the corporate charter to make a hostile takeover difficult. One approach is to stagger the election of the Board of Directors so that directors come up for election in different years; as a result, corporate raiders have a hard time voting their preferred directors onto the Board all in one year. Another approach is requiring a 2/3 majority vote to remove a director.

Carl Icahn

> Carl Icahn was born February 16, 1936, in New York City and grew up in a middle class family. He went to Princeton and is said to have paid for part of his tuition with poker winnings. In 1961, he found his way to Wall Street. In 1968, he set up his own firm, which focused on options trading and arbitrage, a type of trade in which similar assets sell at different prices. The idea is to buy the cheaper asset and sell or short the more expensive one, profiting by the price difference.

> The seeds of Icahn’s activist philosophy may have been planted when he was trying to arbitrage closed-end mutual funds, which usually reflect the net asset value of all securities in which they are invested. But sometimes the fund’s quoted price diverges from the collective value of its underlying stocks and bonds, creating an arbitrage opportunity. If a fund’s basket of securities exceeded the quoted value of the fund itself, Icahn would urge management to liquidate the securities and distribute the unrealized profit to investors.

> Icahn’s reputation as a corporate raider rests in part on his hostile takeover of Trans World Airlines. He reportedly made $469 million on the deal, and the company was saddled with $540 million in debt. TWA couldn’t handle the debt load and went bankrupt.

> Another of Icahn’s higher profile investments was Apple. At the time Icahn disclosed his stake in April 2013, some investors were concerned that Apple would not be as able to innovate after Steve
Jobs’s death. The market also fretted over gains made by some of Apple’s large competitors, such as Samsung and Google.

> But Icahn saw value, starting with Apple’s $100 billion plus pile of cash and a brand name that could be slapped on many new products. Apple was—and is—one of the most valuable companies in the world. So selling it to somebody else was probably not a realistic possibility. Instead, Icahn demanded that Apple use its cash balance to aggressively repurchase its own shares and increase its dividend.

> Apple eventually followed much of what Icahn proposed. It bought back its stock and increased its share dividend, and it experienced a resurgence in its core business. Resulting in more than $3 billion profit for Icahn and his investors.

Dan Loeb

> Dan Loeb December 18, 1961, in California. His father was a partner at a Los Angeles law firm, and his mother was a historian. Loeb started investing in the stock market when he was in high school. He entered college at the University of California at Berkley in northern California. And, after 2 years, he transferred to Columbia, where he earned a bachelor’s degree in economics. After graduating, Loeb worked for several firms, both on and off of Wall Street.

> Loeb began his finance career in 1984 at Warburg Pincus, a well-respected private equity firm. In 1991, he joined the Los Angeles branch of a traditional Wall Street firm, Jefferies—first as a research analyst, and then trading the securities of firms in financial distress. His last position before setting up his own hedge fund was at Citigroup, as a vice president of institutional sales in the high-yield bond area.

> He started his hedge fund, Third Point, in 1995 with only $3.4 million under management. His Third Point fund averaged investment
returns of about 20% a year over a 20-year period. That roughly doubled the S&P 500 return during the same time. Loeb says that most of his investments share the following characteristics:

- They have talented management teams. Over time, good management increases sales, earnings, profit margins, and stock prices.

- They are businesses with strong and growing free cash flows. Free cash flow is money remaining after reinvesting in the business.

- They are firms with a proven track record of capital allocation; that is, the company has invested its money wisely over the long term, whether in new projects or in mergers or acquisitions. Capital allocation also includes returning capital to shareholders in the form of stock buybacks or dividends.

> Loeb calls these firms value compounders. Loeb certainly has talent in identifying these types of companies, but his activist approach also often closes the gap between a stock’s lesser, unrealized value, and its higher potential.

**Bill Ackman**

> Born May 11, 1966, Bill Ackman grew up in an affluent family in Westchester County, New York, and attended Harvard for his undergraduate and M.B.A. degrees. Right after getting his M.B.A., he set up a hedge fund, Gotham Partners, with classmate David Berkowitz.

> On balance, Gotham was successful, but it closed down because of litigation costs related to its trading practices. Ackman was found not to have committed wrongdoing and later resurfaced with his own hedge fund, Pershing Square, partly funded by the conglomerate, Leucadia National.
When Ackman talks about his investment strategy for common stocks, he sounds like a page from Warren Buffett’s book: Buy value stocks that you understand and that have a moat against competitors, and buy companies that can be acquired, especially if prodded by an activist investor.

Like Loeb, Ackman prefers companies that generate a lot of free cash flow, an important and recurring concept.

- The cash-flow statement has 3 parts: cash flow from operations, generated by a company’s core business; cash flow from investing activities, which mainly refers to capital expenditures or long term investments; and cash flow from financing activities, relating to the issuance or repurchase of stock or debt. The net increase (or decrease) in cash is the sum of the 3 parts of the cash-flow statement.

Ackman is ideally looking for a company that generates a great deal of cash after appropriate reinvestments in the business, giving him the flexibility to make his activist ideas more easily implemented.

Value Investing Philosophy

- These 3 investors’ (Icahn, Loeb, and Ackman) addition of activism to the value investing approach is a major contribution to the philosophy of investing. Value investing is the investment strategy that selects stocks based on a belief that they trade for less than their intrinsic value. That is, value investors seek stocks they believe the market has undervalued.

- Sometimes stocks stay cheap for a long time, requiring a catalyst to push the market to revalue the firm. That catalyst could be a new product, new service, new management, or the pro-shareholder strategies recommended by an activist investor.

- A value investor’s worst fear is a value trap—a stock that appears to be selling at a discount but that keeps getting cheaper. Think
Kodak, GM, Blockbuster, WorldCom, Enron, Lehman Brothers, and Radio Shack. The presence of an activist investor like Ackman might spur the firm to change its strategy or sell itself before its core business starts to slip away.

Conclusion

> Sometimes, activist investors are likened to corporate raiders, or the Darth Vaders of the investment industry, especially by target boards and management. In some cases, the negative description may be justified. During the initial large wave of activist investing in the 1980s, some raiders even tried to raid company pension funds.
A more positive assessment of activist investors is that they help keep management on its toes while encouraging more independent boards, and putting firms back in the hands of their shareholders.

Suggested Reading

Ahuja, *The Alpha Masters*.  
Stevens, *King Icahn*.

Questions to Consider

1. How would you describe the investment strategies of Carl Icahn, Daniel Loeb, and Bill Ackman?

2. What tactics are used by activist investors to improve stockholder returns?
Even after the Crash of 1929, Jesse Livermore was said to be worth more than $100 million. This fortune and a smaller one he earned during the Panic of 1907 were built largely by selling short, a technique to profit from falling stock prices. Livermore relied on technical analysis, looking at past changes in price and volume, in an attempt to determine future price trends. By comparison, James Chanos helps us understand fundamental analysis: assessing the business prospects of an enterprise and digging into its financial statements.

Selling Short

> Selling a stock in which you have no current position is called selling short: selling borrowed shares and hoping to buy them back later at a lower price. Brokerage firms often include in their account agreements a provision called a hypothecation agreement, which allows the firm to lend your shares to other investors, usually hedge funds. To help a client sell short, the firm borrows the shares from another client of the firm.

> To engage in this kind of trading means establishing a margin account using borrowed funds. While you have the ability to buy
and sell stocks on margin, custody remains with the brokerage firm until the transaction is complete and you’ve fulfilled your obligation.

> Margin trading and short selling also can wring out excesses in the economy. An example is a stock that is overvalued: Investors rightly expect to profit by selling it short, pocketing today’s price on the expectation the price will fall and completing the purchase after the price has dropped.

> Short selling is often considered a risky strategy. The market as a whole usually goes up over time, so short selling is trading against the long-term tide. But the main risk is that losses theoretically are unlimited. If the stock price keeps rising while you’re betting it will go down, you are on the hook to buy it at any price to replace the shares you borrowed.

> Some market observers think short selling is un-American because its practitioners profit from the decline or destruction of a company’s stock. Occasionally, short sellers go well over the line
in attacking a firm and its management. But shorts can also serve a useful function, such as rooting out suspected financial frauds and limiting the size of speculative bubbles.

**Jesse Livermore**

> Jesse Livermore was born July 26, 1877 in Shrewsbury, MA, and started trading at the age of 14. Livermore initially traded in so-called bucket shops. These were a cross between brokerage firm and bookie, and are now illegal. Bucket shops allowed people to bet on stock prices on the side, without the trades actually going to the exchange. They were mostly used by small investors and gamblers.

> Livermore was a speculator—the kind of trader who stands in contrast with the traditional investment approach of a Benjamin Graham or Warren Buffett, who view stock as the ownership of a business. The way Livermore saw things, long-term investing was riskier than trading. At the same time, Livermore wasn’t what we think of today as a day trader. Instead, he generally held his positions from weeks to months.

> His views on trading versus investing were shaped in part by the Great Depression, when he saw a nearly 90% drop in the Dow Jones Industrial Average from peak to bottom. Livermore felt that if blue-chip stocks could fall by such a magnitude, then almost any company could go out of business over the long term, and therefore buying to hold it was risky.

> Livermore believed nothing new happened in the stock market. The names might change, but price movements repeat, and we can learn and profit from these patterns. In this view, the Apple and Facebook of today might just as well have been the railroads and automotive companies of yesteryear. Livermore criticized traders who tried to get rich overnight, but he thought it was possible for good traders to make a lot of money relatively quickly. In Livermore’s day, an accomplished trader could earn 500% over a 2- to 3-year period, mainly through leverage.
Livermore didn’t trust inside information. He concentrated on the leading stocks of the day and maintained a very concentrated portfolio—typically 8 stocks. That is 4 industries, and 2 stocks per industry. Livermore also traded in commodities such as cotton, wheat, and corn. He felt that while individual stocks could be manipulated, basic commodities were influenced mostly by supply and demand.

Livermore kept a trading journal in which he kept track of price and volume statistics before making a trade and while invested in it. He would also jot down thoughts and ideas related to his positions, or the market as whole.

Livermore was a pioneer of the strategy that is today known as trend following or momentum—the trader’s equivalent of Newton’s First Law of Motion. According to Livermore, if a stock is moving in one direction, it will keep going in that direction until something changes it.

- Some people act on inside information and leave the equivalent of footprints with their trades. Others uncover—or become aware of—news before it is reported. In both cases, other investors try to piggyback on their trades.

- Momentum also works because of market psychology. Investors tend to trade in crowds, getting swept up by greed or fear.

- The biggest risk of momentum trading is a whipsaw: A stock goes up, then down, then up, and so forth. With this type of pattern, you could always be on the wrong side of the trade.

When Livermore entered a position, he did it in stages. If he lost money on the first trade, he would not put any more money into that stock. The trade either had to turn profitable in the relatively near future, or he would cut his losses: Each succeeding purchase should be at a higher purchase price. If he were short selling,
each succeeding short sale should be at a lower sales price. He believed that if your trades showed a profit, it was proof that your analysis was right.

> Livermore’s biggest trading successes occurred during the Panic of 1907 and the Crash of 1929. The Panic of 1907 was set off by a group of investors trying to corner the stock in United Copper Company. This group used a lot of borrowed money, and when the stock fell they couldn’t repay the loans, leading to a run on the banks.

○ Livermore noticed that credit conditions were getting tight. As the market started to fall, he thought margin calls would result in a wave of forced selling. J. P. Morgan personally implored Livermore to stop shorting during the ensuing panic, when the success of the strategy allowed Livermore to pour his trading profits into selling more stocks short. Stocks fell roughly 40% from March through October of 1907. Eventually he did stop shorting, and went long, after earning a profit of $3 million.

○ The Roaring ‘20s saw the U.S. stock market rise about 400% from 1926 to 1929. One high-profile stock, Radio Corporation of American or RCA, went from $2.50 a share to more than $500. Livermore recognized that excesses were building up, and when the market started to crack, he went short. He knew a panic would ensue. As stock prices kept falling, Livermore—just as he had done in 1907—kept shorting, profitably.

James Chanos

> The most famous short seller of recent times is, perhaps, hedge fund titan James Chanos, who runs a firm called Kynikos Associates. (The Greek translates into English as Cynic Associates). Chanos does not rely on momentum trading but rather looks deeply into the fundamentals of a company: its financials and business model.
Chanos was born in 1957 and grew up in a Milwaukee. His family operated a chain of dry cleaners. An excellent student, he enrolled at Yale and majored in economics and political science. He began his investment career at a now-defunct Chicago investment bank. A group of partners there split off to start their own firm, and the 24-year-old Chanos went with them as an analyst.

His first high-profile “short” recommendation identified Cincinnati-based Baldwin-United, a piano maker that had branched out into the insurance business. Chanos thought the company’s financial disclosures were confusing and received an anonymous phone call alleging management shenanigans. In the summer of 1982 Chanos issued a Sell recommendation on Baldwin-United’s stock. The share price quickly doubled, but the company soon began to unravel and declared bankruptcy in 1983. The Baldwin-United analysis gave Chanos the confidence to set up his own firm in 1985.

Chanos looks to short 3 types of firms: companies with a fad product, companies with too much debt, and companies with accounting problems.

- Fads are products or behaviors that are the equivalent of bubbles. They become a craze and then die out. For instance, Chanos made money shorting the toy company Coleco, which marketed Cabbage Patch Dolls in the early 1980s. They were initially scarce, but eventually, anyone who wanted a Cabbage Patch doll was able to get one. Coleco ultimately declared bankruptcy.

Chanos’s most famous short is Enron. Enron started out as a traditional utility. In the 1990s, the power sector was deregulated and some traditional utilities began trading energy contracts, which became a huge part of the business at the Northern Natural Gas Company, which changed its name to Enron.

- Enron’s stock price soared, and the company was routinely lauded as one of the most-admired companies in America.
When Chanos analyzed Enron’s financials, he found that 80% of its reported profits were generated from energy trading. But they were earning only 7% on their trades, while their cost of capital was 10%. In essence, the firm was a house of cards being held up by some strange accounting.

- Further, he discovered that management used hidden off-balance-sheet entities to mask the firm’s debt. Enron’s accounting misdeeds finally came to light, resulting in one of the biggest bankruptcies ever.

  > In 2002, a Barron’s cover story dubbed Chanos “The Guy Who Called Enron.”

**Conclusion**

- Livermore and Chanos both profited immensely from short selling, albeit by using different approaches. Livermore combined momentum with a keen understanding of the macro environment and investor psychology.

- Chanos believes fundamentals drive prices in the end, and he’s willing to wait years to see his bets proved correct. Chanos also views himself as something of a sheriff in the market, rooting out corporate misdeeds and popping bubbles. The Enron example proves that short sellers can act as powerful deterrents to unethical management behavior.

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**Suggested Reading**

Burton, *Hedge Hunters.*


Rubython, *Plunger.*
Questions to Consider

1. How would you describe the investment strategies of Jesse Livermore and James Chanos?

2. How does short selling differ from traditional long-only investing?
George Soros’s $10 Billion Currency Play

Investment managers, primarily in the hedge-fund space, search for opportunities on a global basis. Global macro managers are just as happy to sell short as they are to go long, a bet that the asset price will rise. They might pick individual securities, but these are usually secondary to big-picture themes: which market to invest in; which currency to trade; where to borrow money at its cheapest cost; and how much leverage to use.

George Soros

> George Soros didn’t aspire to be a financier. He wanted to be a philosopher, and to be recognized as a great thinker. He calls himself a failed philosopher. As it turns out, Soros did develop his own vision, which focuses on global macro investing.

> George Soros was born George Schwartz August 12, 1930, in Budapest, His father was a lawyer and his mother’s family owned a prosperous silk shop. The family changed its name in 1936 to avoid rising discrimination against Jewish people at the time. When Germany occupied Hungary in March 1944, Soros very possibly saved his life by posing as the godson of an employee of the Hungarian Ministry of Agriculture.
Three years later, he left the country to live with some cousins in London, and enrolled at the London School of Economics. There, he met the person who would have the greatest intellectual influence on his life: Karl Popper. Soros was chiefly intrigued by Popper’s application of the scientific method to the social sciences.

In 1956, Soros found his way to New York, joining the investment firm of F. M. Mayer and in 1959 joined Wertheim & Co. as a European securities analyst. After about 4 years of seasoning at this well-regarded bank, he moved again to begin a 10-year stint at Arnhold and S. Bleichroeder, today known as First Eagle Investment Management. It was here that he entered the hedge fund business through a fund called Double Eagle. In 1970, near the end of his time at Arnhold, he set up Soros Fund Management.

The Theory of Reflexivity

In 1987, he wrote a book titled *The Alchemy of Finance*, which discusses some of his theories about the social sciences in the context of financial markets. Soros’s main concept is the Theory of Reflexivity.
His first insight was that applying the scientific method to the social sciences is problematic because, unlike a scientific experiment that replicates results, you might get a different result each time.

- Soros posits a feedback loop between prices and fundamentals—earnings, dividends, and interest rates—wherein the price itself impacts the fundamentals.

- Soros’s investment thoughts were influenced in part by Werner Heisenberg, one of the pioneers of quantum mechanics, best known for the Heisenberg Uncertainty Principle, which says that that the act of measuring influences the measurement.

Soros’s theory of reflexivity states that the connection between participants’ thinking and the situation in which they participate reflects two functional relationships: cognitive and participating.

- The cognitive function is the participants’ efforts to understand the situation.

- The participating function is the impact of their thinking on the real world.

Because these two functions interact with one another in a recursive process, markets are rarely in equilibrium, or balance. And yet, equilibrium is one of the central concepts of economics. The market is prone to boom-and-bust cycles.

**Boom and Bust**

- Soros has been able to capitalize on identifying these cycles and turning points, perhaps better than any other investor in history. Although no two markets are ever the same, Soros provides some guidance on how a boom-bust cycle usually plays out. He says it consists of 7 stages.
○ Start with a trend that is not yet recognized by the public as a whole, such as the great returns realized by the early purchasers of Internet stocks.

○ When the trend becomes broadly recognized, that recognition reinforces it; other people act on news and make the same trades. Soros calls this the initial phase.

○ Sometimes a surge in prices peters out. Price increases don’t always result in more increases. However, if the stocks that attracted attention survive this initial phase, they emerge strengthened. Soros calls this a period of acceleration.

○ At some point, a large gap emerges between public perceptions and a company’s fundamentals, and the market also recognizes this reality. For example, investors might realize the company cannot grow profitably or that its market value is out of sync with its potential profits. Soros calls this the moment of truth.

○ Stocks can stay inflated for a long time. They might not immediately plunge in price just because they are overvalued. Soros calls this the period of stagnation, or twilight period.

○ Eventually, something causes a broad loss of belief in the stock. Perhaps the company announced an earnings warning or is met with increased competition. This widespread loss of belief causes a reversal in the popular buying trend. Soros calls this the crossover point.

○ Selling results in more selling, causing an accelerating downward trend. Soros calls this phase a crash. Stock prices fell about 50% between 2000 and 2002, and many Internet stocks fell more than 90% from top to bottom.

> In his book, Soros discusses one boom-and-bust cycle specifically—the conglomerate boom Shorting the Pound.
Great Britain is not a member of the euro currency bloc; its currency is based on the pound sterling, not the euro. However, there was a time when it was on the path to joining the European Exchange Rate Mechanism, or ERM, created 2 decades before the formal launch of the euro.

The vision behind the creation of the euro was to coordinate fiscal, trade, and border policies. The idea was to have a currency bloc whose members would have a combined GDP roughly the size of the U.S. economy and to reduce the risk of another world war by linking member’s pocketbooks.

As a condition of participating in the ERM, members agreed to fix their currency exchange rates within a band relative to the value of other participants’ national currencies. At the time, Germany had the strongest currency, so ERM members agreed to tie their currency to the Deutsche Mark within a plus or minus 6% band.

Britain entered the ERM in October of 1990 at a rate of 2.95 Deutsche Marks for each British pound. Using this ratio, Britain was obligated to keep the pound in a range between 2.78 and 3.13 Deutsche Marks.

For the first couple of years, the British economy performed pretty well. But by 1992, Britain was mired in a recession. Unemployment hit almost 13%. The typical remedy for unemployment is lowering interest rates, but lowering interest rates would have pushed the British pound lower, and the government had to stay within that 6% ERM band.

Market participants knew Britain was caught between a rock and a hard place, and traders began to short the British pound. At first, the Bank of England tried to defend the nation’s currency, buying pound sterling on the open market, and increasing its bank interest rate—the rate the Bank of England charges other banks for overnight lending—from 10% to 12%.
On the surface, increasing interest rates would attract foreign capital, helping to support the price of the British pound, but raising interest rates was also likely to make the domestic economy worse. It would be more expensive for British companies to raise capital, and approval for projects for individual companies would depend on higher projected returns; rising interest rates usually put the brakes on an economy.

Hedge fund sharks believed that Britain couldn’t afford to prop up the pound indefinitely, so betting against the British pound had almost no downside: The British currency would remain pinned to the lower end of its range with the Deutsche Mark. But the upside was large if the pound were revalued or if it exited the ERM entirely.

An article published in the *Wall Street Journal* on September 16, 1992, acted as a catalyst. Because Germany was financially the strongest country in Europe, its Bundesbank was Europe’s most important central bank. The *Journal* article paraphrased the Bundesbank’s president as saying that 1 or 2 currencies in the ERM could come under pressure, a move that signals a devaluation. All eyes turned to England.

Soros’s chief investment officer, Stanley Druckenmiller, initially put a short position on the pound equal to $1.5 billion. But after Druckenmiller explained the logic of the trade, Soros told him to bet big, to the tune of $10 billion. Soros is known for saying, “There is no point in being confident and having a small position.”

On the same day that the *Journal* article appeared, Britain withdrew from the ERM, abandoning the commitment to keep the British pound within a narrow range. Market forces drove the pound sharply lower against most other currencies, especially the German currency. The British government lost more than £3 billion because it had been purchasing the pound, which now plummeted.
Conclusion

> George Soros’s Quantum Fund, from its inception in 1973, provided investors with compound returns of about 20% a year. George Soros’s unique life experiences helped him to become a very successful global macro trader. His theory of reflexivity also provided him with a framework to identify boom-and-bust cycles ahead of the crowd.

> Soros came to believe that modern economic theory has a fundamental problem: that it is based on the assumption of a market usually in equilibrium, where fundamentals almost always drive prices. Soros believed the market is rarely in equilibrium, and he added an element of thinking previously all but unaccounted for in market dynamics. And that is that investors impact market fundamentals through the feedback loop of their own thinking and trading in the market.

> We can learn several lessons from Soros and his theories:

○ First, have a global outlook.

○ Second, try to understand how our own investing decisions are based on market movements and the actions of others and not simply on the market fundamentals.

○ Third, be cognizant of the market’s tendency to gravitate toward boom-and-bust-cycles and the opportunities that these movements might afford.

○ Fourth, if you are a trader, as opposed to being a long-term investor, be as willing to go short as you are willing to go long.

○ And lastly—for the more adventurous and less risk averse—if you have high conviction in an idea, be willing to bet big.
Suggested Reading

Soros, *The Alchemy of Finance.*
Train, *Money Masters of Our Time.*

Questions to Consider

1. How would you describe the investment strategy of George Soros?
2. How would you define global macro investing?
Ray Dalio has always worked for what he wants and not what others want of him. This principle left Dalio feeling that he isn’t forced to do anything—he is doing what is naturally in his self-interest. But part of his having confidence in an investment decision is to see it criticized by others, so he solicits the best independent opinions he can muster. If his argument still holds water afterward, he can have greater confidence in his choice. He calls this approach “stress testing” his opinions. Dalio remains wary about being overconfident, recognizing that all investments engender some uncertainty.

Ray Dalio

- Ray Dalio was born August 1, 1949, in Jackson Heights, Queens. He was an only child, raised by a stay-at-home mother and a jazz-musician father who played the clarinet, piccolo, flute, and saxophone. When Ray was 8, the Dalio family moved to Manhasset, Long Island.

- Like many boys, Dalio shoveled snow and mowed lawns to earn extra money. At the age of 12, he used some of his earnings to buy his first stock, Northeast Airlines through his father’s broker.
He got lucky when the company was acquired in short order, and he tripled his money.

> Dalio kept investing, and by the time he graduated from high school he had a portfolio worth several thousand dollars. But he wasn’t a great student, so when it came time to pick a college, he stayed close to home, attending Long Island University. There, Dalio branched out from stocks to trade futures contracts on commodities. Futures contracts offer investors the opportunity to trade with a lot of leverage.

> Dalio managed to become a strong and focused student at Long Island University, which helped gain him admission to Harvard Business School. During the summer after his first year at Harvard, Dalio interned as a commodities trader at Merrill Lynch, and while finishing his M.B.A. program, Dalio and some friends set up a commodities trading shop called Bridgewater Associates. That venture never took off, but Dalio held onto the Bridgewater name.

> After getting his degree, Dalio worked as a trader, first at a small, well-regarded, investment bank and then at Shearson Hayden Stone. Dalio didn’t like the corporate culture at Shearson and reportedly came to blows with his department head at a New Year’s Eve party. He left Shearson with some of his commodities trading clients in tow and launched Bridgewater Associates. He was 26 years old. Today, Dalio runs the largest hedge fund in the world.

**Bridgewater Strategies**

> Bridgewater’s focus is global macro- and multi-strategy. That is, the firm searches the world for investment opportunities and uses a range of strategies, both long and short, with a variety of financial instruments.

> Dalio attributes at least part of his success to Transcendental Meditation, a discipline he claims to have practiced daily since
1968. He believes that meditation frees the mind and allows it to detach from emotion and perceive the environment more clearly.

> Dalio’s philosophy is spelled out in a self-published 100-plus page handbook called Principles, given to all new employees and available for download on the Internet. Bridgewater employees must be prepared to follow these more than 200 principles closely and be open to scab-picking reviews of themselves and their peers.

> Bridgewater has two main funds: Pure Alpha and All-Weather. Alpha signifies superior performance on a market risk-adjusted basis or relative to a certain benchmark. All-Weather is designed to withstand any market environment.

- Pure Alpha fund historically has provided a return of about 13% per year after fees as compared to the S&P 500, which returned about 10% a year over a comparable period, with less risk compared to the market.

- All-Weather strategy is divided into 4 quadrants, driven by growth and inflation. It is managed by using trading models that historically have worked in each of the 4 quadrants. Thus, regardless of the general state of the economy and financial markets, usually at least something is working well in this portfolio.

> Another unique factor at Bridgewater is that the firm lets its clients combine the Pure Alpha and All-Weather portfolios in custom-tailored ways. Academics call the combination of alpha and beta strategies portable alpha, and it combines the best features of both efficient and inefficient markets. Clients can pick the beta exposure they want through the All-Weather strategy and combine it with the Pure Alpha strategy.

> Bridgewater is a leader in an area of portfolio management known as risk parity. The standard institutional portfolio is about 60% stocks and 40% bonds. But more than 80% of the risk is tied up in
stocks. Risk parity aims to level the risk of each asset class and can be applied to other asset classes on a global basis. The end result is a more risk-balanced portfolio.

- Giving stocks a smaller weight or hedging some of the equity exposure—either through derivatives or short sales—can lower equity risk.

- Borrowing or taking on more credit exposure could increase the bond-related risk.

Dalio’s Principles

> Employees are encouraged to engage in constructive criticism. Even a first-year analyst has the ability to constructively criticize Dalio—supposedly without fear of retribution. And virtually all meetings at Bridgewater are recorded, and freely available to all employees. Although the culture might work for Dalio and many
Bridgewater employees, it doesn’t work for everyone. About a quarter of Bridgewater’s new employees are reported not to make it to the 1-1/2 year point with the firm.

> Dalio’s handbook, Principles, was originally meant for Bridgewater’s employees, but when the financial press heard about it and some stories started depicting Bridgewater as a hedge fund cult, Dalio responded by making Principles available to anyone via the Internet. He stresses that a fundamental principle of the firm’s culture is thinking for oneself—the opposite of cult-like behavior.

> Dalio’s management principles revolve around a culture where it is acceptable to make mistakes but unacceptable to not identify, analyze, and learn from them, where opinions are stress-tested, and where reality is faced head-on.

> Bridgewater trades a large number of models across many different types of products and global markets, and some important information about investing can be gleaned from the way Dalio and his colleagues look at the markets. According to Dalio, Bridgewater’s trading system is 99% systematized, or model based.

> Neither Dalio nor his employees follow a discretionary approach, but he is a big believer in the idea of evolution. In the context of investing, his systems evolve as they gain experience, enabling Bridgewater to add or change rules.

○ For example, Dalio looks at how changes in oil prices affect countries. Between the first and second oil shocks during the 1970s, crude oil was discovered in the North Sea. Dalio noted that this oil find enabled the United Kingdom to go from being a net importer of oil to a net exporter. So his models would be updated when the facts change.

> In Bridgewater’s early years, Dalio kept a journal of his trades, writing down his reasons for entering or exiting a position on a
pad of paper. When he closed a transaction, he would look at what actually happened, and compare it with his reasoning and expectations when he put on the trade—an early approach he took to learning from his mistakes—but it is inefficient compared to what a computer can do with a process known as back testing.

> Back testing is testing an investment strategy against historical data on how it would have performed in the past. There are two potential problems with back testing.

  ○ One is that when something new occurs, no historical data are available to use as a reference point.

  ○ The second is finding patterns or rules that appear to work but are simply due to chance. Statisticians call this spurious correlation. Some techniques can reduce spurious correlation, but it can never be eliminated.

> In creating the Bridgewater system, Dalio and his team focus on models that they believe are universal and timeless. The firm tests these models over long periods—hundreds of years if the data are available—and across many countries, emerging and industrialized alike.

> Bridgewater’s computer models focus on fundamental analysis, rather than technical analysis. Fundamental analysis looks at financial ratios, valuation levels, credit spreads, inflation, central bank policy, and the like, while technical analysis looks at changes in price and volume data.

> His Bridgewater strategies now have about 15 uncorrelated return streams Dalio believes that these streams can turn a profit no matter what happens to the overall market. Dalio focuses on the return streams, or drivers, first. He says that drivers are the cause, and that correlations are the consequence of observed actions.
Two randomly selected U.S. stocks will correlate historically at about 60%, since both are probably tied to the performance of the U.S. economy. Dalio finds that a portfolio of about 15 strategies with close to zero correlation reduces portfolio risk by about 80% against a basket of U.S. stocks like the S&P 500.

Dalio and his team trade in about 150 different markets around the world. Markets to Dalio mean not only different asset classes—like stocks, bonds, currencies, and derivative exchanges—but also spread positions, long in one security and short in another.

The firm wants to be sure it’s not overweighted in any market. Therefore, it trades in virtually every liquid market available, and the amount it trades in each market tends to be small in relation to the total size of the market. Bridgewater generally holds its positions for a year to a year and a half, so that the firm can gradually enter and exit positions.

Conclusion

One of the unique things about Ray Dalio is his intense focus on learning from his mistakes. He thinks that anyone who has made money in the markets has also experienced the tremendous pain of a terrible mistake and that pain can be a catalyst for growth: The same mistakes are then less likely to be repeated.

Dalio’s focus on the macro helped him avoid losses during the Great Recession, and his focus on uncorrelated return streams is an important part of his funds’ risk-control process. Until recently, his Pure Alpha Fund had experienced only 2 down years in its 20-plus years of existence.

Bridgewater’s culture very likely contributes to the firm’s stellar results. Dalio says the culture of the firm is to seek truth by encouraging independent thinking and innovation in an environment of radical transparency, meaning that people hold
each other to high standards and are completely honest with each other while still being extremely considerate.

Suggested Reading

Dalio, *Principles.*
Schwager, *Hedge Fund Market Wizards.*

Questions to Consider

1. How would you describe the investment strategy of Ray Dalio?
2. What role does culture play in the success of Bridgewater Associates, according to Ray Dalio?
A way to think about futures contracts is the hedging principle. If you own something—in the way that Exxon owns oil—you can hedge your ownership of the physical commodity by selling futures contracts against the same product, essentially locking in today’s value and protecting against any decline. Conversely, if you need something in your supply chain—like Starbucks needs coffee—you can hedge against a future price increase in the commodity, and therefore your cost of restocking, by buying coffee futures today.

Futures Fundamentals

> In the United States, futures markets emerged in the mid-1800s, mainly as a way to help farmers hedge their risks against the uncertainty of prices. A futures contract during the spring could lock in the price a farmer would get after selling his crops in the fall. Most futures contracts expire within 9 months. This is not a coincidence, as the agreements originally were closely tied to the farming cycle.

> Futures contracts tend to be very large; futures contracts on the S&P 500 are for 250 times the value of the index. Thus, if the
S&P 500 is trading at a level of 2000, the face value of the futures contract is $500,000. Investors typically must put down a deposit, called margin, of between 10% and 25% of the face, or notional, value. The less volatile contracts, like Treasury bills, require a lower margin. The more volatile contacts, like oil and gas, require larger margins.

> Every day, the exchange and your broker update the market price of your investment and compare it to the margin, a practice called marking to market, to ensure that you have enough equity to maintain the contract. If the market goes against you, you receive a margin call, which requires additional contribution of capital to maintain the contracted margin. Otherwise, your position will automatically be closed.

> The intermediary in the commodities exchange that makes sure the trading goes smoothly from start to finish is the clearinghouse. It guarantees that the contracts will be honored should an investor default.
Suppose you bought a futures contract for 1000 barrels of oil, and have no interest in taking physical delivery of the petroleum product. You could enter into another contract to sell 1000 barrels of oil on the same expiration date. Since your net purchase—or delivery—of oil is zero, the trade is settled according to the exchange.

When you enter into a futures contract, the price is locked in for the life of that contract. But the market price changes every day, so the potential profit on a long (or purchase) contract in the futures market equals the today’s price less the contracted price. If there are differences in the value of the contacts, they must settled in cash.

Futures contracts, in aggregate, are informative about what the market thinks the price of commodities will be in the future. Mapping out the prices of all these different contracts on a graph produces the futures curve. Some other factors go into futures pricing, but the futures curve provides a good indication of the market’s expectations of prices in the future.

Paul Tudor Jones

Paul Tudor Jones was born September 28, 1954, in Memphis. His father was a lawyer who attended the University of Virginia Law School and encouraged his son to attend UVA as well. He majored in economics. Two weeks after he graduated, an uncle introduced Jones to a legendary commodities trader named Eli Tullis, who had a special talent for the cotton futures market.

Jones went to work for Tullis as a trading clerk in New Orleans. One lesson he learned under the older master was to stay calm. But New Orleans is, of course, also home to Mardi Gras, the New Orleans Jazz Fest, the Sugar Bowl, the New Orleans Saints, and the French Quarter of bars and restaurants.

Jones enjoyed the nightlife of New Orleans a little too much. His job was to man the phones during trading hours and call in
the cotton quotes he got from New York to Tullis’s office in New Orleans. But, after partying with his friends late one night, Jones said he fell asleep at work the next day. He recalls Tullis using a ruler to pry his chin off his chest, and when he woke up, Tullis said, “Son, you are fired.”

> Though getting fired was a painful experience, Jones learned from it and developed a legendary work ethic. He routinely worked 80 hours a week early in his career. He landed a job as a floor trader at the New York Cotton Exchange and then became a commodities broker for the Wall Street brokerage, E. F. Hutton. At age 25, he became the firm’s youngest vice president.

> He decided to begin trading full-time for his own account in 1980, when he formed Tudor Investment. Jones says he enjoyed 2.5 very profitable years but got bored. He decided to build up his own firm, instead and, in 1983, he started managing other people’s money at Tudor.

**Jones’s Trading Strategies**

> Jones made most of his money with technical analysis, which relies on historical patterns in price and volume data in the belief they have some predictive value. A simple technique that Jones uses is called a moving average, which averages a stock’s data over different time periods and has the benefit of smoothing out erratic data. A stock trading above its moving average is considered bullish, while a stock trading below its moving average is considered bearish.

> Jones uses the 200-day moving average of closing prices. By keeping an eye on the 200-day moving average, an investor can sell quickly if the trend is down. Jones advises never averaging losers. In other words, if a position starts losing money, either sell or wait for the trade to be profitable before adding more capital.
In addition to technical analysis and his own personal investing principles, Jones also employs fundamental analysis: examining such factors as earnings, interest rates, and industry gossip. Keeping up with price and volume data helped Jones developed a keen understanding of his own personal psychology as well as a broader sense of market psychology. Jones also attributes a good part of his success to strong risk management. He says, “Every day I assume every position I have is wrong.”

Jones says that a target investment’s low valuation (or price) is not, by itself, a sufficient risk-management technique to guard against losses. He uses a number of techniques to reduce risk. One is to make use of stop-loss orders. Rather than enter formal stop loss orders into a brokerage’s trading system—where they might be viewed by other investors—Jones uses mental stop-loss. If that number is hit, he gets out no matter what.

Jones also decreases trading volume when things are going poorly and advises others never to trade in situations where they have no control, such as trading in advance of a company’s earnings report or a Federal Reserve announcement.

As his hedge fund got bigger, Jones also came to look closely at the liquidity of his positions. Large investors can move the market on their own with their buying and selling behavior, a dynamic called market impact.

Conclusion

Jones’s trade right before the stock market crash of 1987, when he shorted stock futures tied to the S&P 500 index, actually went against his main approach of following the trend, and it’s interesting from several perspectives.

The stock market had traded sideways from 1968 to 1981 before moving into a long bull market for much of the 1980s. Then, in late 1986, one of Jones’s colleagues—Peter Borash—superimposed
a graph of the 1929 market atop recent market behavior. The patterns looked eerily similar. Jones was convinced that stocks were substantially overvalued.

> The market had more recently experienced a near-term peak in August 1987. Stocks were up 44% over the previous 12 months, and the price-to-earnings ratio of the S&P 500 index was a pricey 23 to 1—well above its long-term average of 15.

> Then, on October 13, 1987, at the end of a long wave of mergers and acquisitions funded by low-grade corporate debt, known as junk bonds, the House Ways and Means Committee took up a major piece of financial legislation. The legislation proposed to limit interest deductions on debt that financed corporate takeovers, as well as other financial engineering, such as leveraged buyouts.

> Although potential explanations for the turn that the stock market was about to take were many, major stock indexes fell 10% over the next 3 days: Wednesday, October 14, through Friday, October 16. That was the biggest 3-day decline since May 1940, when German forces broke through French lines.

> Jones was particularly worried about an investment strategy called portfolio insurance, which was in wide use at the time. This strategy uses derivatives to help hedge the risk of a portfolio and includes a trend-following component.

> No news story or rumor had circulated on Friday, October 19—or over the weekend—sufficient to rattle the markets. Even so, a great deal of anxiety permeated the markets, and while buyers and sellers alike believed the market was overvalued, they also were confident that they could predict—or stay ahead—of the market.

> On Monday, October 19, 1987, the Dow Jones Industrial Average plunged a record 508 points, or 22.6%, on the largest trading volume in history. (The Dow’s biggest drop previously had been
The 12.8% decline on October 28, 1929, known famously as Black Tuesday.

> Jones made special efforts to safeguard, or conceal, his positions, but it doesn’t cost much to trade, and Jones would pay the transaction costs to safeguard the confidentiality of key trades. It’s been reported that he was up 62% in the month of October 1987.

**Suggested Reading**

Jones, “Perfect Failure.”


**Questions to Consider**

1. How would you describe the investment strategy of Paul Tudor Jones?

2. How does investing in futures differ from stock or bond investing?
Quantitative analysts build financial models to estimate the value of security prices. This approach differs from fundamental analysis, which focuses on looking at a company’s financials, along with its management, and factors affecting the industry, and from technical analysis, which focuses on changes in security prices and their corresponding trading volume. Quants might look at price and volume data, but also at a host of other data—including interest rates, currency values, financial statement data, and much more—to create their own quantitative models.

James Simons

James Simons was born in 1938 in Newton, MA, a Boston suburb, and grew up in nearby Brookline. Simons demonstrated an aptitude for math at an early age, and he was drawn to the Massachusetts Institute of Technology, which he entered in 1955. Simons graduated 3 years later, with a bachelor’s degree in mathematics. He went on to get a Ph.D., also in math, at the University of California, at Berkeley. He was 23 years old.
He was recruited to be a cryptographer by the Institute for Defense Analyses, a research group affiliated with the Department of Defense; the next year, the math department at the State University of New York in Stony Brook recruited Simons to be its chair.

But soon, the urge to apply his math skills to the financial markets began to take hold. He departed Stony Brook to form an investment company, which evolved into Renaissance Technologies.

Its research and investment staff consists almost exclusively of mathematicians and scientists. By design, very few Renaissance employees have academic backgrounds in finance. Simons didn’t want his quantitative analysts—or quants, as they are known on Wall Street—to be biased by conventional financial theories.

Quant Basics

Almost all investment managers use some sort of quantitative analysis. Traditional fundamental managers use an investment screen to find fast-growing companies trading at reasonable valuations and with high profit margins. They might then look at the financial statements of these firms and try to meet with the management of the firms they like best before ultimately buying a stock.

No model for quantitative analysis is perfect, especially one that is based on historical data. Sometimes something new happens that has never occurred before. Nassim Taleb, the distinguished professor of risk engineering at New York University and a former derivatives trader, coined the term black swan to describe an unforeseen and perhaps unpredictable event. A Black Swan event occurred after the terrorist attacks on the United States in September 2011: When financial markets re opened several days later, stock prices plunged. So quant models may work, but they will never be perfect.
One widely used technique is called a factor model, which estimates the relationship between two variables. Independent variables are used to help predict dependent variables, and it’s not uncommon for quant models to contain dozens of independent variables.

Stocks go up or down for a variety of reasons, including for no reason other than general market movements. But stocks are also often impacted by specific actions, such as movements in interest rates. Rising rates, especially when they are unexpected, usually cause stock prices to fall.

Quants often use dozens of factors in their models. Not only that, but when investing in stocks, the models may weigh these various factors differently, depending on the circumstances. Quants are also constantly updating their models with the latest data. The models make adjustments as they go along, changing to reflect this new information.
Sometimes quants look for signals before making a trade, such as a spike in stock volatility, which might be indicative of market fear.

- The term risk off refers to an environment in which fear pervades the market, and investors are selling assets that are traditionally risky: such as stocks, high yield bonds, and emerging market securities. In a risk off trade, safe haven assets like U.S. Treasury notes or gold often outperform.

- A positive signal might be triggered by a Federal Reserve announcement that is more welcome than expected. In that case, stock prices might rise as part of the risk on trade.

The term risk on indicates that investors are willing to increase the risk of their portfolio by purchasing more volatile securities, which they deem to have significant upside. High yield bonds and the stocks of smaller or speculative firms may also do well in a risk on environment.

Some quants engage in high-frequency trading, a computer-driven investment strategy that emphasizes high transaction volume along with extremely short-duration positions and automated algorithms that do the buying and selling. High frequency trading programs often transact on an electronic communication network, or ECN. ECNs are basically an electronic stock exchange.

The big fear with the quants’ automated trading models is that the computer might act unpredictably and blow up the firm. And there have been instances when quant models wreaked havoc.

- On August 1, 2012, Knight Trading Group fired up a new, untested computer-trading program. While attempting to fill the orders of just 212 customers, it was unable to recognize that orders had been filled. And, in some cases, it entered orders more than 1000 times their intended amounts.
The result was 4 million unintended trades across 154 stocks totaling 397 million shares. The firm lost $460 million in 45 minutes. Knight’s stock crashed, and the company was sold to another high frequency trading firm at a bargain price.

A Cautionary Tale

> Long Term Capital Management focused on arbitrage trades. The bulk of its assets were in 4 different types of trades:

○ Convergence among U.S., Japan, and European sovereign bonds.

○ Convergence among European sovereign bonds.

○ Convergence between newly issued and previously existing U.S. government bonds.

○ Long positions in emerging markets sovereign bonds, hedged back to dollars.

> The differences in the expected returns between the two baskets for each of these trades was small, usually less than 1%. Thus, in order to get an attractive return, the firm had to use leverage. Long Term Capital began trading in 1994, and, for the first few years of operations its strategy worked like clockwork. Then, in August 1998, Russia defaulted on its debt, resulting in a worldwide financial panic.

> During times of market distress, the most liquid and highest-quality assets usually perform the best. Unfortunately, Long Term Capital was short those assets that investors demanded most. The combination of illiquid assets and excessive leverage proved to be the downfall for Long Term Capital. On the hook for $30 for every $1 it had bet, a roughly 3% loss could have wiped out virtually all of the firm’s capital.
The Federal Reserve, fearing that a forced liquidation of Long Term Capital’s portfolio would cause a meltdown in the global financial markets, orchestrated a meeting with some of the largest firms on Wall Street and the French banks Paribas, Credit Agricole, and the Société Generale. The Wall Street firms and the French banks collectively agreed to pool $3.625 billion in bailout funds to help Long Term Capital slowly unwind its portfolio and thereby limit broader damage to the financial markets.

The enduring lesson of Long Term Capital is this: The smartest people on earth can lose all of their money—and their investors’ money, too—when greed, overconfidence, and excessive leverage collide.

James Simons Strategy

James Simon’s strategy at Renaissance Technologies managed to steer clear of calamities on the order of Long Term Capital. Simon’s Medallion Fund began trading in 1988. It did not immediately set the world on fire. Instead, it generated a peak-to-trough loss of 30% by April of 1989. Simons shuffled the fund’s management team and made changes to its computer models to shorten the firm’s horizons. The average holding period switched from weeks or days to intraday.

The changes worked. Incredibly, Medallion returned 98.2% in the peak financial crisis year of 2008, when the S&P 500 fell 37%, and these returns were net of Medallion’s hefty fees, which ranged as high as 5% of assets and 44% of profits.

Medallion uses lots of models, and it trades across all asset classes, including stocks, bonds, currencies, commodities, and more. Diversification across models and asset classes is likely one reason for Medallion’s success. No other fund of has been able to replicate its performance.
When Simons stepped down as CEO in 2009, he named two super quants to succeed him: the co-CEOs Peter Brown and Robert Mercer. Back in 1993, Simons himself had hired Brown and Mercer away from IBM, where they were in charge IBM’s speech-recognition group.

It turns out that speech-recognition software has a lot in common with quantitative stock analysis. Both tasks require getting signals out of noisy data. Speech-recognition software also tries to predict what will come next, using techniques from probability theory. This type of logic can be extended to predicting security prices, though with less precision.

Besides the raw brainpower of the quants working at Renaissance—and the terabytes of daily data that the firm collects—Simons attributes much of the organization’s success to its work culture. When asked about the secret of his organization’s success, he once said, “Have an open atmosphere. The best way to conduct research on a larger scale is to make sure everyone knows what everyone else is doing.

Quants make a living exploiting market inefficiencies, or strategies that appear to consistently offer superior profits. But those who benefit from exploiting market inefficiencies often become victims of their own success.

Since trends seem not to last, quant firms are constantly trying to update their models and replacing models that have lost their effectiveness. These models may no longer work either because they never found a true anomaly or because they worked so well as to have arbitraged away their value.

As the Medallion fund got larger and better established, it became too big to produce the returns its investors were accustomed to. Management closed the fund to new investors, and today
manages it mostly for insiders. However, Renaissance has developed a number of new funds for investors.

> These newer funds generally have a longer time horizon and can accommodate more investor capital. For example, the Renaissance Institutional Equities Fund, or RIEF, reportedly has the capacity to handle up to $100 billion in capital.

> From RIEF’s launch in September 2005, though September 2015, it returned 9.8% per year. This was better than the S&P 500 return of 6.7% per year over the same period, as well as the performance of most hedge fund indexes.

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**Suggested Reading**

Lowenstein, *When Genius Failed*.
Patterson, *The Quants*.

**Questions to Consider**

1. How would you describe the investment strategy of James Simons?

2. Why might quantitative investment strategies have an advantage over more traditional stock picking strategies?
Distressed-Asset Investors: Tepper, Klarman

The notion of investing in distressed stocks and bonds gives some investors the shivers. They would rather sell than buy, and move onto healthier firms. But therein lies the opportunity. Buying what others don’t want—and what they might indiscriminately sell—creates opportunity. That is, if you have the temperament to tread there and the ability to perform detailed analysis that differentiates a zero investment from a hero investment. Two of the best investors ever to set foot in the distressed-investing space are David Tepper and Seth Klarman.

David Tepper

> David Tepper was born in Pittsburgh September 11, 1957. His father was an accountant and his mother taught at a public elementary school. He bought his first stock, Career Academies, while still in high school. The stock traded at $2 a share, and Tepper bought one lot, or 100 shares. The company went bankrupt and Tepper lost all his money. It was a good reminder that just because an asset is cheap doesn’t mean it can’t go lower. That was a lesson Tepper never forgot.
Tepper attended the University of Pittsburgh, paying for his undergraduate degree with a combination of student loans and the meager pay he made working at the school’s library. He also hit his stride, academically speaking, graduating with high honors and a degree in economics in 1978. Tepper was hired as a credit and securities analyst in the trust department of a local bank, which has since disappeared in a series of mergers.

He left 2 years later to pursue his graduate degree in finance at Carnegie Mellon University and worked for 2 years in the treasury department at Republic Steel in Youngstown, Ohio. By this time, Tepper already had a lot of experience in evolving and distressed industries.

In 1984, he joined the former Keystone Investments in Boston as a junk-bond analyst. Keystone was one of the nation’s first mutual fund companies until it, too, was merged out of existence. About a year after joining Keystone, Goldman Sachs recruited him to work as part of its newly formed junk bond group. And, in short order, he became the head of Goldman’s junk bond trading desk.

He considered himself one of the best traders at the firm, but repeatedly was passed over for partner; reportedly, he didn’t get along well with Jon Corzine, who was then head of fixed income trading at Goldman, and would go on to become CEO and then a U.S. senator and governor of New Jersey.

Frustrated, he left Goldman in 1993 to set up his own hedge fund, Appaloosa Management. He was 35, and he started with $7 million of his own money and $50 million from investors. In the years since, Appaloosa Management became one of the most successful hedge funds of all time, averaging about 27%, net of fees, a year over a period of more than 20 years.

Although Tepper specializes in distressed assets—meaning damaged firms that are on the brink of, in, or recently emerged from bankruptcy—he starts with a global or macro view of the
world, and then drills down to the micro to identify specific securities to trade.

Distressed Investing Background

- Any list of once-distinguished firms that have gone bankrupt would be quite long: General Motors, Kodak, Texaco. Some never come back. Others, like GM and Texaco, reorganize and continue to operate.

  - The billionaire investor, Bill Ackman, made one of his most famous bets on the firm, General Growth Properties, when it was severely distressed. General Growth is one of the largest mall owners in the United States. it went bust during the financial markets crisis of 2007–2009. Ackman helped steer the firm through the bankruptcy process and turned a $60 million investment into $1.6 billion 2 years later.

- The two types of bankruptcies for U.S. corporations are chapter 7 and chapter 11. In a chapter 7 bankruptcy, the firm liquidates and shuts its doors. In a chapter 11 bankruptcy, the firm continues to operate while taking at least temporary protection from its creditors.

- One potential resolution may be for the reorganizing firm to issue new stock to its bondholders and thereby retire or defray its debt. In this case, the original shareholders might lose some or all of their equity investment in the company.

- Who gets paid—and in what order—can be complex, in bankruptcy court. Employees, attorneys and firms that extend trade credit typically are paid first. If a fund or investor group controls more than a third of the debt, the entity can petition the court with its own restructuring proposal. Two-thirds of the creditors must approve any restructuring plan before it goes to the bankruptcy judge for final approval.
For the firm’s security holders, the absolute priority rule determines the subsequent sequence. Debt holders are first, ranked by seniority. Then preferred stockholders are paid, followed by the original common stockholders of the firm.

If the firm was considered investment grade before the bankruptcy filing, its bondholders can expect to get about 60 cents to 90 cents on the dollar. If the bonds were rated as noninvestment grade, or junk, before the filing, the recovery rate is usually much lower: typically, about 20 to 30 cents on the dollar. This payment is called the recovery rate.

Being a successful distressed-assets investor requires a unique combination of skills. The first is the temperament to invest in this
risky area. Second is the ability to estimate the investors’ recovery rates and envision what a firm will look like post-bankruptcy. Large investors in this space also need the ability to create alliances with other interested parties in the bankruptcy proceedings to develop a reorganization plan that will be accepted by fellow creditors and the bankruptcy judge.

> David Tepper made a fortune by buying the debt and equity of bank stocks like Citigroup and Bank of America during the financial markets crisis. He correctly reasoned that these banks were too big to fail and would be bailed out by the U.S. government. Tepper’s funds netted $7 billion in 2009 alone. The example of distressed-bank securities makes clear that Tepper is not afraid to go where other investors fear to tread.

**Seth Klarman**

> Seth Klarman, the other distressed-assets investor, was born May 21, 1957, in New York. His family moved to Baltimore when he was 6. His father was an economist at Johns Hopkins University, and his mother taught English at a local high school.

> Klarman bought his first stock at the age of 10. It was a good one: Johnson & Johnson. Finding himself in regular need of Johnson & Johnson Band-Aids, Klarman was following what would become known as the Peter Lynch theory of investing in what you know.

> Klarman majored in economics at Cornell. After his junior year, an uncle helped him land a summer internship at the New York-based investment firm, Mutual Shares, which specialized in distressed and deep-value investing. It was run by two investing legends: Max Heine and Michael Price. Klarman said, “I learned the business from two of the best, which was better than anything you could ever get from a textbook or a classroom.” After graduating from Cornell with honors in 1979, Klarman joined Mutual Shares full-time as an analyst.
While he was earning his M.B.A. at Harvard, one of his professors there, William Poorvu, recognized Klarman's potential and asked him to manage some money for him and friends. Thus, in 1982, Klarman launched his own firm, Baupost Group, right out of the classroom. Baupost is an acronym of the names of the 4 investors who seeded Klarman with $27 million. It now manages about $30 billion and provided investors with a return of about 20% a year for more than 30 years.

**Klarman Strategy**

> Klarman typically begins his investment analysis by looking for a margin of safety before entering a position. With bonds, it involves an assessment of the likelihood that a company can repay its debt. If the company is distressed, or bankrupt, the analysis will include detailed estimates of recovery rates. When looking at stocks, Klarman assesses various valuation metrics, including financial measures such as price to book, price to earnings, price to cash flow, dividend yield, and price to replacement cost.

> One example is Klarman’s investment in the debt of the former Enron Corporation while the disgraced company was in bankruptcy proceedings. Most investors wouldn’t touch Enron with a 10-foot pole, but Klarman analyzed Enron’s assets and liabilities and bought some of its debt for 10 to 15 cents on the dollar.

> Klarman’s analysis suggested the company’s debt was worth 30 to 40 cents on the dollar. It took a few years to sort out, but Enron’s debt eventually traded at about 50 cents on the dollar.

> A way of finding value is to seek for motivated sellers. Klarman cites several examples: One is buying a stock after it is removed from a leading market index. Index funds typically can’t own things outside the index they are formed to replicate: They have to sell non-index assets. This type of behavior may temporarily depress the because of the selling pressure, but it will eventually revert to its fair value.
Klarman also likes to invest in spinoff companies. Many investors will sell a spinoff, or divested asset, either because they don’t want it or because it constitutes too small a share of their portfolio to be worth monitoring. This selling pressure—indeed the fundamental value of the stock—may create opportunities.

Klarman also sees opportunities in an absence of buyers for otherwise attractive investments. The major Wall Street firms might see little advantage in making a market trading in a company’s stock. This lack of competition creates opportunities for investors like Klarman who are willing to value stocks independently and do original research.

Klarman also looks for investing catalysts that are independent of the market, such as a company increasing its dividend payments or resuming dividend payments after having stopped them at some point in the past. The same thinking holds for investing in a distressed firm that resumes the payment of interest on its bonds.

Klarman is a bottom-up investor who looks at the fundamentals of a stock and what it is worth. Macro issues are of far less importance to him. Klarman thinks it is easier to be correct about a single company than it is to forecast what is going to happen in a large and diverse economy.

Finally, patience is an important factor in Klarman’s success and that of most value and distressed investors. He is willing to hold onto investments for several years in order to achieve their full value.

Suggested Reading

Ahuja, *The Alpha Masters*.
Greenwald, Kahn, Sonkin, and van Biema, *Value Investing*.
Klarman, *Margin of Safety*.
Questions to Consider

1. How would you describe the investment strategies of David Tepper and Seth Klarman?

2. How would you define distressed investing?
Motorcycles, Gold, and Global Commodities

Commodities trading in the United States began to take shape in the mid-1800s as railroads started to crisscross the country. Centrally located Chicago thus became home to many of the largest commodity exchanges. A farmer who plans to harvest a crop in the fall probably has no idea of what the market price will be several months out. Locking in the price before the fall harvest reduces downside risks, and this certainty improves expense planning. Commodities can be defined broadly to include metals, oil, gas, and food. Over the years, a large number of commodities came to be traded on organized exchanges.

Commodities

> Time magazine once called Jim Rogers the “Indiana Jones of finance.” He is best known for bringing commodities such as precious metals and agricultural products to the broad investing public. Along with the billionaire George Soros, Jim Rogers was a cofounder of the hedge fund, The Quantum Fund. Over the decade he worked there, The Quantum Fund returned an incredible 42,000% to investors.
Today, commodities trading can include livestock, energy (oil, natural gas), and metals (copper, aluminum, silver, and gold). Jim Rogers suggests 4 ways that commodities investing works:

- Buy shares in companies that produce commodities or that provide services to those companies: mining companies, for example, or heavy-equipment manufacturers that support mines.

- Invest in countries that produce commodities. Commodity-rich countries include Canada, Argentina, Australia, and New Zealand.

- Invest in real estate in areas rich in commodities. Wealth is created in a particular country is often spent on real estate.

- Invest in index funds, mutual funds, and futures contracts tied directly to commodities, though if you do trade futures, Rogers suggests exercising caution when borrowing to execute the transaction because there is no limit to your potential losses.

Jim Rogers himself created one of the first commodity indexes in 1998, the Rogers International Commodity Index, which tracks a basket of global commodities. Rogers also set up a number of commodity-index investment funds. Today, most large money-management firms offer their own commodity funds.

One of Rogers’s earliest experiences with the commodities market was his bullish call on oil in the early 1970s. Oil was trading for less than $4 a barrel. Rogers realized that oil and gas supplies were being depleted, and his research showed that gas pipelines had little in the way of reserves. In the early 1970s, the supply-demand balance tilted in favor of the oil producers. the Arab oil embargo specifically and the lack of readily available alternatives, generally no doubt played a role in oil’s massive price acceleration.
The Art of Investing: Lessons from History's Greatest Traders

Jim Rogers

James “Jim” Rogers was born October 19, 1942, in the small town of Demopolis, AL. His father managed a plant for Borden Chemical, which made Elmer’s Glue, among other things. Rogers went to Yale for his undergraduate degree and majored in history. While at school, Rogers landed a summer internship at the Wall Street wealth-management and investing firm of Dominick & Dominick, and by the end of that summer, he knew he wanted to try his hand at making his fortune on Wall Street.

Upon graduating from Yale, Rogers received a scholarship to study philosophy, politics, and economics at Oxford. As a young man, he was influenced to travel in search of adventure by Charles Dickens's novel, The Pickwick Papers. The fictional Pickwick Club of London forms a traveling society, in which 4 members journey about England, and report on their adventures.

The two 6-week breaks a year Oxford offered gave Rogers the opportunity to travel throughout much of Europe, and these excursions planted the seeds for his future as a world traveler and global investor. After graduating from Oxford, Rogers served a 2-year stint in the Army during the Vietnam War. His posting was to an Officer’s Club in Brooklyn, which he helped manage. He also began managing the investment portfolio of his superior officer—which, during a bull market, did well.

In 1970, Rogers went to work for a well-regarded Wall Street investment bank known as Arnhold and S. Bleichroeder, which was known for its international brokerage operation. Today, the firm is known as First Eagle Investment Management. While at Bleichroeder, Rogers met his future business partner, George Soros, and the two men set up a hedge fund: The Double Eagle Fund.

In time, Rogers and Soros left Bleichroeder to form the legendary Quantum investment fund, one of the best-performing hedge funds.
funds ever. At Quantum, Rogers was known for his rigorous and original research, while Soros was known for his trading ability and his willingness to use a lot of leverage.

> An early win for the pair at Quantum was seeing the changes underway in the trash-collection. Waste services were moving away from a municipal-collection model, often dominated by organized crime, and toward a more mainstream business run by publicly traded companies, like Waste Management.

> The Quantum Fund was so successful that it afforded Rogers the luxury of retiring 3 years before he turned 40. He took to traveling extensively, taught security analysis for several years at Columbia, and wrote magazine articles and 6 books. All the while, Rogers expanded his interest in investing globally, with a particular emphasis on what he saw firsthand during his travels: emerging markets and commodities.

> Fairly early on—and long before the idea registered broadly around the world—Rogers became convinced that the 21st century belonged to Asia generally and to China in particular. He saw a geopolitical reordering of countries and economies.

**Investment Strategy**

> Jim Rogers’s investment performance—including that incredible 42,000% gain over the decade he was at Quantum—did not happen by accident or dumb luck. It is the result of enormous hard work. It’s said that he didn’t take a vacation for 10 years while he worked at the Quantum Fund. He regularly read 40 periodicals and 8 trade journals. He also devoured hundreds of annual corporate reports each year.

> As an investor, Rogers takes a big picture approach that focuses on long-term trends—a macro strategy. Long-term trends analysis is also called secular analysis. For example, a secular trend would
be high levels of student loan debt among many millennials, consequently shaping their spending habits.

> Rogers regularly reviews company insider-trading levels. Corporate insiders—management and board directors—typically know more about their companies than outside investors do. They are also often paid in stock. If they buy additional stock, it’s usually a bullish sign.

> Rogers also believes in investing only in things or companies that you know something about. He says, “Most people know a lot about something, so they should just stick to what they know and buy an investment in that area. That is how you get rich.”

> Like value-investing pioneer Benjamin Graham, Rogers likes to buy depressed assets with a margin of safety: that is, some downside protection to an investment. For example, the company might have a lot of cash on hand, or valuable assets that can be sold in a pinch. At the same time, Rogers also looks for positive changes taking place with the investment: what some analysts term a catalyst. A catalyst could be a new product or service or changes in government policy for example.

> Rogers’s favorite informational resources include the CRB Commodity Yearbook, an encyclopedia of commodities and pricing data published by the Commodity Research Bureau in Chicago, as well as reports from the U.S. Department of Agriculture.

> Because Rogers takes a long-term approach, he focuses on changes in supply and demand. If Rogers saw a sharp rise in the price of a commodity, he would do some digging to find out what caused it. The answer might be that aging production facilities reduced supply, or newly opened mines for metals increased supply, potentially pushing prices down.

> Rogers’s academic background and interest in history and politics help him connect the dots around the world to see how history
and events might affect securities prices on Wall Street or the commodities markets in Chicago.

> The fungible nature of commodities—that is, their relative interchangeability—shows why they are a cyclical asset class.

○ In the high-price part of the cycle, farmers who may be receiving a relatively low price for wheat will shift production to a higher-priced crop: corn, for example. The corn supply will generally increase until its price settles at an equilibrium value, at which point a price-based incentive to switch from wheat to corn will no longer pertain.

> Rogers believed that full cycles in commodities tend to last, on average, 17 to 18 years.

> Given his hedge fund beginnings, Rogers is as likely to go short on an investment as he is willing to go long. Rogers also takes pride in his contrarian streak. The crowd is influenced by mob psychology and usually overshoots on the upside or downside.
The contrarian can often profit as the market pendulum reverts to fair value.

In this regard, Rogers is not afraid to bet big on countries he considers under-followed, or even unpopular. If he believes in a market, he is willing to be the first—or one of the earliest—investors in that market. This approach often enables him to get in at bargain prices.

Rogers has 4 tests of what constitutes a good country to invest in.

- Its market must be doing much better than it has done previously. This approach helps him avoid the scenario of catching a falling knife. One clue he looks for is whether the price of the market index holds its own in the face of bad news.

- An out-of-favor national market with upside potential should be better off than is generally recognized, with the potential to provide a positive earnings or revenue surprise.

- The national currency should be convertible. That is, the currency should be based on market prices and freely exchangeable into U.S. dollars, euros, Swiss francs, or some other widely traded currency.

- It must have well enough established markets for the investor to get in and get out easily. It must be liquid. A market that doesn’t trade much is illiquid, making exiting during periods of market volatility a challenge.

Conclusion

Jim Rogers has lived the dream of many, becoming rich at a young age, and traveling around the world in search of knowledge and adventure, and he put his experience to good use. He was one of the first to invest actively in frontier markets—that is, an emerging
market for emerging markets—and he is one of the strongest advocates of global investing.

> He has done more to educate the average investor about commodities than any other person. His keen understanding of supply and demand and his relentless work ethic made this formerly obscure asset class more accessible to all of us in the general public.

Suggested Reading

Rogers, *Hot Commodities*.
Train, *Money Masters of Our Time*.

Questions to Consider

1. How would you describe the investment strategy of James Rogers?
2. Why might commodities act as a diversifier to a traditional stock and bond portfolio?
Private equity is the ownership of any company that doesn’t trade on a public stock exchange. In Wall Street terms, private equity refers to a specific niche of investing: leveraged buyouts (LBOs) and venture capital. LBOs involve buying out the existing shareholders of a publicly traded company and delisting the firm’s shares on the exchange where it formerly traded. The deal is usually paid for with debt—borrowing against the acquired company’s assets—hence the term “leveraged.” Venture capital, refers to investments in young growth companies.

Private Equity Fundamentals

> The two most prominent figures in the LBO world are Henry Kravis, the cofounder of the investment firm Kohlberg, Kravis, and Roberts; and Stephen Schwartzman, cofounder of the Blackstone Group. Both men became multibillionaires in the private equity market. The American Investment Council—the private-equity industry’s trade group—estimates that about 2600 private equity firms in the United States invest more than $300 billion in the United States alone.
Growth is nice, but cash is king in the leveraged-buyout business. Piling debt on a company requires cash flow to pay off the obligation. The amount of debt depends on the buyout target and the tightness of the credit markets at the time, but a rule of thumb is to borrow 3 to 4 times the amount of money that you plan to put up to complete a leveraged buyout.

Part of the debt might be obtained from a bank, while the rest is often raised by borrowing against the target firm’s assets. The more you borrow, and the more leverage you take on, the greater the investment risk.
As a result, quite often in an LBO, the debt taken on is considered below investment grade—that is, junk bonds. As the name indicates, junk bonds have a high credit risk, and must offer investors higher yields than conventional debt. The LBO market and junk bonds grew up together during the 1980s.

An ideal leveraged buyout target would be a firm with high free cash flow—that is, cash after expenses; a low debt-to-equity ratio; a strong competitive position in a stable industry; and a lot of cash on hand or assets that can be sold quickly, as needed to pay down debt. This kind of target acquisition leaves the buyer with opportunities both to profit on the purchase and to have an exit strategy.

The LBO market is robust, but it has not been without controversy. During the 1980s, Michael Milken helped turn the junk-bond market into a popular way for troubled firms and corporate raiders to raise large amounts of money for LBOs and other merger-related activity when he was with the now-defunct investment banking firm of Drexel Burnham Lambert.

As the junk bond and merger and acquisition (M&A) markets galloped forward, Milken and others were accused by federal authorities of various securities-related violations, including concealing the true owner of a security, insider trading, and tax evasion. Milken pled guilty to 6 felonies, but not to insider trading. He was sentenced to 10 years in prison, later reduced to 2 years. He was permanently banned from the securities industry, paid investors back $400 million, and paid the Securities and Exchange Commission $200 million.

Henry Kravis

Henry Kravis was born January 6, 1944, in Tulsa, Oklahoma. His father was an engineer who set up a successful energy consulting and engineering firm in Oklahoma’s oil patch. Kravis attended the prestigious Loomis Chaffee School in Connecticut, and Claremont
McKenna College, which offered strong economics and political science programs, which Kravis wanted to study.

> During his Claremont years, Kravis worked at a number of summer jobs, including research and institutional sales positions at Goldman Sachs. He graduated in 1967 with an economics degree, and that summer worked as an intern for a mutual fund called Madison.

> Kravis then enrolled at Columbia Business School for his M.B.A. After Columbia, Kravis worked in the corporate finance department at Bear Stearns, a Wall Street securities firm that was a leader in the nascent LBO industry. Kravis joined Bear around the same time as his cousin, George Roberts. Both were successful there, each of them making partner while still in their early 30s. But while Bear’s leveraged buyout business was successful, they and their boss—Jerome Kohlberg Jr.—clashed with Bear’s CEO, Cy Lewis.

> These tensions led the trio to leave Bear Stearns in 1976 to set up one of the first firms focused solely on LBOs. They called it Kohlberg, Kravis, and Roberts, KKR, and their most famous deal was RJR Nabisco, notorious, not only for its size, but also for epitomizing the Wall Street greed and frenzy that enveloped the market at the time.

> Kravis and KKR first discussed the idea with its CEO, Ross Johnson. Under this arrangement, Johnson would reportedly pocket up to $100 million. But Johnson partnered instead with the rival investment bank, Shearson Lehman Hutton, under a deal to take RJR private for $17 billion—$75 a share. KKR upped the offer to $20.4 billion, or about $90 a share, but the board rejected both offers.

> In the end, the RJR board accepted KKR’s offer of almost $25 billion. KKR ended up earning less than 1% a year on this investment, according to some estimates. Not a disaster, perhaps, but the deal tied up a huge amount of firm capital—not to mention
management time and attention. Another 20 years would pass before Wall Street tried an LBO of that magnitude.

Henry Kravis’s Strategy

> KKR’s funds historically delivered strong investment returns to clients and grew to manage more than $120 billion for investors, controlling more than 100 portfolio companies with revenues greater than $200 billion a year. A number of attributes define KKR’s success.

> Kravis was a pioneer. KKR’s long history is not simply a track record, but a network of connections with companies, managements, investors, and financing firms that helps KKR find deals to which others do not have access.

> KKR focuses strongly on operational improvement at acquired properties, which often results in greater profitability at these companies. Improved profitability, in turn, increases the valuation multiple at which the acquired company can be ultimately sold.

> If a public company misses its quarterly earnings number, its stock gets crushed. This dynamic results in public companies sometimes overemphasizing short-term results. In contrast, private equity firms with a long-term focus, like KKR, may be in a better position to manage the firm for the long-term.

Stephen Schwarzman

> Stephen Schwarzman was born in Philadelphia February 14, 1947. He grew up in a Philly suburb called Abington and his father owned a dry-goods store that sold such products as drapery and linens. Schwartzman started working in the store on weekends when he was 15. The experience helped establish his work ethic and basic knowledge of business. It also taught him that he didn’t want to work in retail sales.
Schwarzman was his high school class president and went on to study psychology, sociology, and anthropology at Yale. Upon graduating in 1969, he found work as a securities analyst at the Wall Street brokerage firm, Donaldson Lufkin & Jenrette. He left DLJ after less than a year to complete his obligation in the Army Reserves before heading to Harvard for an M.B.A.

After graduating from Harvard in 1972, Schwartzman joined the investment banking firm, Lehman Brothers. He was made a managing director by the age of 31 and head of mergers and acquisitions shortly thereafter. After a dozen years, Schwartzman arranged for Lehman to merge with the financial services company American Express: a combination that had the effect of forcing out Lehman’s CEO, Pete Peterson, who, until then, had been a mentor to Schwartzman. Both men decided to leave and form their own firm, which they named Blackstone.

Blackstone started as a boutique investment bank, providing advisory services to corporations. And then, in 1987, the pair decided to focus on the LBO market. Blackstone raised $830 million for its first leveraged buyout fund shortly before the stock market crashed in October of 1987. This good timing proved to be characteristic of the firm’s future success.

**Schwarzman Strategy**

Schwarzman is intensely competitive and known for outworking his competitors. His scrappy nature helped transform Blackstone from its startup stage to the largest private equity firm in the world, with more than $350 billion in assets under management. Schwarzman and Blackstone colleagues frequently seek buyers for the firms they acquire even before a deal is consummated.

Schwartzman also controls his investment firm’s risk by imposing a breakup fee on the target company if the transaction doesn’t go through. If Equity Office Properties had walked away from
the Blackstone deal, it would have had to pay Schwartzman’s firm $720 million. Schwarzman doesn’t hesitate to pressure the management and board of target companies to make a quick decision on his offers.

> Technology firms often are considered unsuitable LBO targets because their products may have a short life span, and technology-intensive industries generally require a lot of research and development and capital expenditures to keep the business in good shape. That said, Schwartzman will buy companies near a cyclical bottom in earnings. One of his most successful leveraged buyouts was the German chemical firm, Celanese.

○ Blackstone offered to buy Celanese for $17 a share in 2004, but the company’s management kept asking for a higher price, eventually yielding an offer of $32.50 a share, or about $3 billion, including debt. The deal terms are said to have made Schwarzman nauseous, but he met management’s asking price. Schwartzman took some comfort that he was buying a solid company for less than book value, and believed that the industry would eventually rebound. Blackstone put up $650 million, and borrowed the rest.

○ About a year after taking Celanese private, the chemicals industry rebounded, and Blackstone cashed out by taking Celanese public again. The net result was about a 600% profit for Blackstone.

> Private equity firms like KKR and Blackstone have diversified in more recent years into other types of alternative and nontraditional investments. For example, they are now active in the lending and credit markets. Blackstone itself is now the largest owner of real estate in the world, according to Schwartzman, and the firm remains heavily involved in the commercial real estate space.
Conclusion

> Private equity and LBOs might seem to be part of the rarefied world of high finance, outside the realm of small investors, but the reality is that many of us belong to pension plans that have some portion of their assets tied up in private equity funds along with stocks, bonds, and hedge fund investments.

> Private equity is probably touching your life in one way or another. Many of the firms are now operating on a global scale, and their influence is felt in almost every industry and community.

Suggested Reading

Carey and Morris, *King of Capital.*

Questions to Consider

1. How would you describe the investment strategy of Henry Kravis and Stephen Schwartzman?

2. How do private equity firms try to increase returns for their investors?
Four Women Who Moved Financial Markets

Women, in aggregate, are better investors than men. They tend to be more patient, trade less, and have a greater focus on risk, all of which are important characteristics of successful investing, empirical studies show. Of course, not all women (or men, for that matter) invest in the same way. Four women renowned for their investing prowess are Hetty Green, Linda Bradford Raschke, Sonia Gardner, and Leda Braga. Each did it in her own unique way.

Hetty Green

> Hetty Green was once known as “the witch of Wall Street.” She’s also the first woman to be widely regarded for her investing skill. At the time of her death in 1916, she was worth between $100 million and $200 million—$2 billion to $4 billion today.

> She was born Henrietta Robinson November 21, 1834, in New Bedford, MA. Her father built a fortune in the shipping business. Hetty opened her first bank account at the age of 8. She was the family’s bookkeeper, and she read the financial section of the newspaper aloud to her grandfather. Her father died in 1865 leaving her an inheritance of about $5 million.
When asked about her investing strategy Green once said, “There is no secret in fortune making. When I see a good thing going cheap because nobody wants it, I buy a lot of it and tuck it away.”

Green avoided borrowing money or otherwise using leverage. Her discipline and fearlessness buying during panics—which occurred in 1857, 1873, 1893, 1901, and 1907—played an important role in her investing success. Green also amassed a real estate portfolio, acquiring 6000 pieces of property across 48 states.

Notwithstanding her wealth, Green was known for her miserly behavior. She supposedly never turned on the heat or used hot water. She often wore the same clothes and dined on graham crackers, ham sandwiches, and small pies. Green also minimized the taxes she paid, routinely changing her residence so she couldn’t be found by tax collectors. Once, when her son injured his leg in a sledding accident, Green took him to a charity hospital for free care.

**Big Picture**

A brokerage account application includes various data points such as income, trading experience, gender, and marital status. University of California researchers Brad Barber and Terrence Odean, analyzed the trading records of a large discount brokerage firm between 1991 and 1997, reflecting the financial information of about 35,000 U.S. households.

The data revealed that women investors outperformed men by 1.4% annually on a risk-adjusted basis. How actively one traded played a key role in this result. The research found that men traded 45% more, on average, than women did. Barber and Odean attribute the higher incidence of trading to the men’s overconfidence in their trading ideas.
The results were even more pronounced among single men and single women. Single men traded 67% more often than single women did; and the women outperformed the men by 2.3% a year.

Another study found that hedge funds run by women outperformed the aggregate hedge fund index every year from 2007 to 2014. Woman-run hedge funds generated annual returns of 5.64% and a cumulative return of 59.43% compared to index returns of 3.75% annually and 36.69% cumulatively.

**Linda Bradford Raschke**

Linda Bradford Raschke was born in 1959 in Pasadena, CA, and as a child, she helped her father look for patterns in the charts of stock prices. She attended Occidental College in Los Angeles, where she double-majored in economics and musical composition.

At Occidental, Raschke also became involved in a program in which students managed a trust fund set up by a school donor. After graduation she tried to get a job as a stockbroker, but was turned down by every firm she applied to. Eventually, Raschke was offered a position as a floor trader on the Pacific Stock Exchange for a 50/50 split of the profits she generated.

Raschke is a short-term trader with a focus on technical analysis. She trades in 20 different markets and usually is active in about 6 at any given time. She looks for patterns in security prices by analyzing historical price movements and trading volume data. Raschke believes that her most important skill is her ability to perceive patterns, an ability she attributes to her musical training.

Discipline and concentration are related to patience, a skill Raschke believes is important for a trader. Raschke focuses on short-term strategies over periods of a couple of days to a couple of weeks. She says she believes short-term price swings can be predicted with some degree of precision because they are based on human behavior.
Raschke especially likes one pattern based on contrarian psychology: If the price of a stock, bond, or commodity is trending up for several days in a row, then almost everyone likes it and it is ripe for a fall, so she will sell it short. Conversely, if the same asset falls for several days in a row, human psychology tends to be mostly bearish, and she may be inclined to step in to buy. This strategy is summarized in her statement that successful traders buy into bad news and sell into good news.

She helps fine-tune her exit and entry points on contrarian trades with a formula known as a McClellan oscillator, calculated by finding the numbers of advancing and declining stocks adjusted by a moving average of prices. It provides a measure of overbought or oversold positions and helps her determine if the pendulum has swung too far in one direction.

One of the techniques Raschke uses is a matrix that contains probabilities on historical price patterns. The first dimension corresponds to the past behavior of the asset. The second dimension is what will happen to the stock price in the future. The items inside the matrix are the probabilities of transitioning from one dimension to the other.

Raschke’s number one rule is, “Don’t try to make a profit on a bad trade; just try to find the best place to get out.” She also advises, “Never add to a losing position.”

Sonia Gardner

Another accomplished female investor is Sonia Gardner, who—with her brother Marc Lasry—manages more than $10 billion through their New York hedge fund, Avenue Capital Group, which focuses on distressed assets.

Gardner was born February 16, 1962, in Morocco. A few years later, her family moved to Milford, CT, where she shared a room
with her brother and a younger sister. Their father was a computer programmer and their mother taught French at a private school.

> Gardner attended Clark University in Worcester, MA, majoring in philosophy and graduating in 1983 with honors. She went on to earn her law degree at the Benjamin Cardozo School of Law in New York. Lasry got a job managing about $50 million of the partners’ capital at the New York investment banking firm, The Cowen Group, and soon he needed a lawyer he could trust.

> During their time at Cowen, Gardner and Lasry met the reclusive Texas investor, Robert Bass, who hired them to manage a $75 million portfolio of distressed assets for him. Bass also let them create a brokerage firm under the Bass umbrella, called Amroc Investments. Two years later, the pair left the Bass organization.
To run their own debt-brokerage firm, which kept the name Amroc and maintained an affiliation with the Robert Bass group.

To diversify Amroc’s business, Gardner and Lasry formed the hedge fund management company, Avenue Capital Group, which they started in 1995 with $10 million in capital. Five years later, it had $1 billion under management. Gardner was initially a portfolio manager, instrumental in producing returns that enabled the firm to grow rapidly. Later, she transitioned to executive management, overseeing all operations.

Avenue Capital’s basic investment philosophy is to find good companies with bad balance sheets. Further, it looks to find firms with sustainable businesses and positive cash flow, but whose financial situation is distressed.

Avenue Capital typically commits to about 50 investments at a time. It states that it avoids leverage, and tries to keep a cash cushion of about 10% to 20% to take advantage of new opportunities and to avoid a cash crunch when liquidity dries up. Avenue Capital suffered losses of about 25% during the 2007–2009 recession, but it bounced back so strongly that it was able to return $9 billion to its investors a few years later.

Leda Braga

Leda Braga is the founder and CEO of Systematica Investments, with more than $10 billion under management. She probably manages more money on a day-to-day basis than any other woman in the world. Braga was born in Rio de Janeiro in 1966. She earned a Ph.D. in engineering from Imperial College London, where she remained for 3 years afterward as a lecturer.

Braga went on to join J. P. Morgan in London as part of its derivatives research team. When J. P. Morgan spun off part of the derivatives business into a firm called Cygnifi Derivatives
Services, Braga joined as the head of valuation. When J. P. Morgan colleague Michal Platt cofounded the hedge fund, Blue Crest Capital Management, Braga moved to Blue Crest, where she was a star as it grew into the largest hedge fund in Europe.

> Braga formed her own firm, Systematica, with Blue Crest initially retaining a 49% stake. Systematica trades in more than 150 markets around the world—including equities, fixed income, foreign exchange, energy, metals and agricultural commodities. Its models look not only at price data, which can be used to evaluate trends, but also such information as interest rates, currency movements, and financial statements.

> Price trend following seems to work, over time, for a number of reasons. Market psychology—be it fear or greed—tends to move in waves. Some investors extrapolate near-term to the long term, resulting in trend-following behavior. Often some investors uncover information before others and act on it, moving the price. Eventually the information becomes widely known, further reinforcing the trend.

> Systematica’s models tend to be market neutral. That is, they try to be independent of the market movement as a whole. Generally, a portfolio can be made market neutral with offsetting hedge positions, such as shorting a market index or specific securities. Braga’s portfolios also aim to limit exposure to other factors, such as being too big in an illiquid market.

> When a *Newsweek* reporter tried to speak with Braga awhile back for an article on women and investing, she declined to comment. A spokesperson said she preferred to speak about investing, rather than gender.
Suggested Reading

Ahuja, *The Alpha Masters*.
Fortado, “Lady Braga.”
Schwager, *The New Market Wizards*.
Slack, *Hetty*.

Questions to Consider

1. How would you describe the investment strategies of Hetty Green, Linda Raschke, Sonia Gardner, and Leda Braga?

2. Why have studies found female investors, on average, tend to outperform male investors?
The challenge of developing your own investment philosophy and approach, as sketched by the models considered at in this course, should match your personality, skills, risk tolerance, and resources. You will need a high degree of self-knowledge and confidence to choose whether to be a growth or a value investor; whether you will actively manage your portfolio or turn it over to a professional advisor; whether to accept the risks of using leverage or avoid debt altogether. Whatever path you choose, continue to study and learn from the great investors who have gone before you.

The Chrysler Story

> Walter Percy Chrysler was born on April 2, 1875, and grew up in Ellis, IA, where his father was an engineer for the Union Pacific Railroad. Given his father’s profession, it’s no surprise that Walter Chrysler started his own career as a railroad mechanic and machinist before making his way into the automotive business.

> Over the next century, the Chrysler Corporation’s up-and-down fortunes taught us something about how to look at the stock market—or any investment. At one point or another, Chrysler has been all of the following: a growth stock, a value stock, a distressed asset, a mergers-and-acquisitions target, a bankruptcy,
The auto industry came to signify what growth investor T. Rowe Price called cyclical growth—that is, sensitive to the macro-economy and each part of its cycle. The car makers’ momentum slowed substantially as oil prices quadrupled during, and after, the oil embargo of 1973–1974, when American automakers were caught flat-footed with fleets of gas guzzling models.

Chrysler, in particular, was on shaky financial ground by the late 1970s and hired a firebrand former Ford Motors president, Lee Iacocca, to run the troubled company. Although Chrysler was losing money hand over fist—and on the verge of bankruptcy—Iacocca persuaded Congress to support the company with a loan guarantee that kept the company afloat, at least temporarily. A new lineup of vehicles, led by the fuel-efficient K-car series and the newly invented minivan, is what really saved Chrysler.

Peter Lynch started buying Chrysler stock in 1982, reasoning that the government loan guarantee insulated Chrysler from bankruptcy and that its cash position was markedly improved by the $1 billion sale of its military tank division to defense contractor General Dynamics.

The next seminal moment in Chrysler’s history occurred when Germany’s Daimler-Benz acquired Chrysler for $36 billion in 1998. Nine years later, Daimler sold 80% of Chrysler for $7.4 billion to the private equity firm Cerberus Capital Management. Cerberus thought it was buying an impaired firm at an attractive price, but the financial markets crisis and recession of 2007–2009 wiped out both Chrysler and GM, leaving them bankrupt and their common shares essentially worthless.

Chrysler received another government bailout. Then, in a series of transactions, Fiat bought the U.S. government stake in Chrysler.
for $11.2 billion, resulting in a loss of roughly $1.3 billion for U.S. taxpayers.

> Several lessons are clear from Chrysler’s story. One is that picking a winner in a new and growing industry like automobiles can be very profitable, at least for a time. A second is the dynamic nature of companies and industries. Chrysler, a firm that helped usher in the golden age of automobiles, went bankrupt once—and almost twice. A third is the increasingly global nature of financial markets.

Investment Checklist

> The first item on the checklist is risk. Everyone needs a strategy to deal with risk. One aspect of a risk-management plan is to identify how much you want to earn or how much you can afford to lose. What are your upper and lower boundaries, in terms of financial risk and reward?

○ When you’re starting out in life, typically you can afford to take on greater financial risks, even with fewer assets, on the expectation that your nest egg will grow, and you will have time to overcome any losses.

○ Find a level of diversification consistent with your risk tolerance. Owning a portfolio of treasury securities is not very diversified but is considered low risk. Owning a portfolio of distressed assets is also not very diversified, and the risk might be quite high. If you combine lower- and higher-risk instruments—such as growth stocks, utility bonds, and other instruments—you can develop a portfolio that is custom-blended for your personal risk tolerance.

> The second item is investment approach. Active investing refers to a strategy that tries to outperform the market. Passive investing refers mostly to index funds, which mirror the performance of a widely followed market index, such as the Dow Jones Industrial Average or S&P 500.
Passive investing might also take a long-term buy-and-hold approach, even without trying to track an index. John Bogle, the founder of the mutual fund company Vanguard, showed us that passive investing strategies often outperform actively managed mutual funds.

Third, you’ll need to know what types of financial securities you want to invest in and how actively you want to change your weights or allocations devoted to them. A wide range of investments is available for everyone—from the cautious and inexperienced to the expert and adventurous; from basic stocks and bonds to hedge funds, private equity, and even some very exotic derivative instruments.

The rest of the questions on my checklist apply mostly to people who want to take an active role in managing their investments, rather than outsourcing the activity to a trusted advisor.

What investing edge might you possess? The former Fidelity Investments portfolio manager Peter Lynch says, “Invest in what you know.” If you think about it, you probably do know a lot about at least one slice of the investment universe—from your job, your school, your community, your family, and this knowledge might be your edge when it comes to investing.

Do you want to be a trader who buys and sells or an investor who buys and holds? A trader typically focuses on a time horizon of less than one year, while an investor maintains a horizon of a year or more.

You should also ask yourself whether you are a growth investor or value investor, or some combination.

Investors like Benjamin Graham and Warren Buffett are value investors while Philip Fisher and T. Rowe Price are growth investors. In contrast, John Templeton, a pioneer of international investing, adopted a flexible approach that...
encompasses both, and he gave us the question: Should international securities be part of my portfolio?

> Continuing, ask yourself: large-cap, small-cap, or both? Large-cap firms are generally more stable and often pay a dividend. Small-cap firms often have less information available, but historically have had higher returns and higher risk over long periods.

> A more difficult question, requiring some deeper expertise, is whether your approach will be mostly fundamental, technical, quantitative, or some combination.

○ Seth Klarman is an example of a fundamental analyst who analyzes a firm’s financials and understands company operations, industry, and management in great detail. Alternatively, Jesse Livermore was one of the most successful practitioners of technical analysis; an approach that focuses on finding patterns in past price movements that could be useful in predicting future prices.

○ Hedge fund managers James Simons and Leda Braga are quantitative investors. They don’t visit companies or even care what a company does, but rather spend their time building mathematical models that predict where security prices are going.

> Ask yourself what investments mistakes you make or are susceptible to making. Market psychology, or behavioral finance, is the field of analyzing investor mistakes and tendencies—and profiting on them.

○ The contrarian investor David Dreman is often willing to buy what the market seems to hate—like tobacco stocks, when they were being investigated by the federal government.

○ Ray Dalio, who runs the world’s largest hedge fund, suggests keeping a trading or investment journal detailing the rationale
for your investments and their outcomes, as one way of uncovering and learning from your mistakes.

- By contrast, other successful investors, like Linda Raschke, harness the power intuition part of their trading or investment process. If you find your intuition to be associated with some of your better investment decisions, perhaps it can be incorporated into your investment philosophy.

> Finally, ask yourself if you have the temperament to follow the rules you set up. Jesse Livermore, was a great trader, but he made and lost several fortunes over his lifetime. He said he lost money when he didn’t follow his own rules. Your investment philosophy and approach should match your personality, skills, risk tolerance, and resources.

**Conclusion**

> One final great investor is Joel Greenblatt, who might not be a household name, but he has one of the best investment track records of all-time. During the decade when Greenblatt ran the hedge fund Gotham Capital, he generated annual returns of 50% before fees. He ultimately closed the fund and returned the profits and original capital to outside investors, but he and his colleagues continued to manage their own money, with stellar results.

> Joel Greenblatt was born December 13, 1957, in Great Neck, Long Island, about an hour from Manhattan, and attended the University of Pennsylvania’s Wharton School ultimately earning an M.B.A. After one year in law school, Greenblatt realized he wasn’t interested in a legal career and took a job as a risk-arbitrage and special situations analyst at a startup hedge fund called Halcyon Investments.

> He was soon doubling his money trading in his personal account, so a friend put him in touch with Michael Milken, the junk bond king. Milken offered to put up the bulk of the money for a new fund
Greenblatt wanted to manage, and he launched Gotham Capital in 1985 with $7 million under management.

> Greenblatt’s most famous strategy revolves around finding good stocks that are also cheap. Greenblatt’s thoughts are deep, and his logic compelling. He outlines an investing approach that combines value investing with special-situations investing. Special-situations investing focuses on nontraditional investments like spinoffs, merger arbitrage, rights offerings, long-term options, and others.

> Greenblatt provides some specific advice to improve your results. He suggests looking for businesses that institutional investors—such as pensions and insurance companies—don’t want, especially if they are too small for the big institutions to own. Greenblatt also says to look at the behavior of corporate insiders: whether they are buying or selling. They know the business best.

> As we saw with both Walter Chrysler and Joel Greenblatt—your investment philosophy and approach should match your personality, skills, risk tolerance, and resources.

Suggested Reading

Greenblatt, *You Can Be a Stock Market Genius*.
Schwager, *Hedge Fund Market Wizards*.

Questions to Consider

1. After reviewing the Investment Checklist in this lecture, how would you describe your personal investment philosophy?

2. How does the case study of Chrysler relate to many of the investment strategies discussed in this course?


Bodie, Zvi, Alex Kane, and Alan Marcus. *Investments*. 10th ed. New York: McGraw Hill Education, 2013. This is the most popular investments textbook used in college courses. It provides a good academic foundation for the topic.


and his journey from an investment banker at Lehman Brothers to cofounding Blackstone.


**Dreman, David.** *Psychology and the Stock Market: Investment Strategy Beyond Random Walk*. New York: American Management Association, 1977. This is David Dreman’s first book. He makes an argument that it is possible to “beat the market” by being aware of market psychology and following a contrarian investment strategy.


Greenwald, Bruce, Judd Kahn, Paul D. Sonkin, and Michael van Biema. Value Investing: From Graham to Buffett and Beyond. New York: John Wiley & Sons, 2000. This excellent book features a discussion with a range of value investors and includes a chapter on Seth Klarman, detailing his investment strategy.


Jones, Paul Tudor. “Perfect Failure: Commencement Address to Graduating Class of the Buckley School,” June 10, 2009. Accessed September 1, 2016. https://www.scribd.com/doc/16588637/Paul-Tudor-Jones-Failure-Speech-June-2009. In this commencement speech to a group of ninth graders, Jones discusses learning from failure and details the time he got fired from working for commodity trading legend, Eli Tullis. The experience of being fired caused Jones enormous pain, but he eventually used it as a source of inspiration as he developed his enormously successful trading career.


Klarman’s take on value investing. The out-of-print book is so revered by investors that used copies on Amazon.com often sell for more than $1000.

Laing, Jonathan. “The King of Bonds.” Barron’s, February 20, 2011. No current biography of Jeff Gundlach is available. This Barron’s cover story discusses Gundlach’s background and his split from TCW and provides some glimpses into his investment strategy.


Loomis, Carol. “The Jones Nobody Keeps Up With.” Fortune, April, 1966, 237–47. This article on A. W. Jones brought hedge funds perhaps their first mainstream attention. Before the article, hedge funds were a somewhat unknown niche in the investment universe.


———. When Genius Failed: The Rise and Fall of Long-Term Capital Management. New York: Random House, 2000. This is a fascinating book that, as indicated by the subtitle, describes the rise and fall of Long Term Capital Management. Insight is provided into the principles of the firm as well as its investment strategies.


Patterson, Scott. The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed It. New York: Crown Publishing Group, 2010. This book discusses the background and provides a sketch of the trading strategies of many of the top quantitative investment managers. The part of the book related to James Simons and Renaissance Technologies is most applicable to this lecture.


Rostad, Knut. The Man in the Arena: Vanguard Founder John C. Bogle and His Lifelong Battle to Serve Investors First. New York: John Wiley & Sons, 2013. This book provides insight into Bogle “the person” as well as his evolution from the CEO of an actively managed firm, Wellington, to the founding of Vanguard, the firm most responsible for the index fund revolution.


———. *The New Market Wizards: Conversations with America’s Top Traders*. New York: HarperCollins, 1994. This is the second of 3 successful books that feature interviews with top investment managers. Linda Bradford Raschke is featured in one chapter and is the only woman to appear in the series.

———. *Hedge Fund Market Wizards*. New York: John Wiley & Sons, 2012. This is the third in a series of excellent books that focuses on interviews with top money managers. This particular book features interviews with Ray Dalio and Joel Greenblatt, covering their backgrounds and investment strategies.


Soros, George. *The Alchemy of Finance: Reading the Mind of the Market*. New York: John Wiley & Sons, 1987. This is a somewhat theoretical book in which Soros articulates his Theory of Reflexivity, which argues that prices affect the fundamentals of an asset and that financial markets are prone to a series of boom and bust cycles.

and his investment philosophy as articulated in what has become known as the “Icahn Manifesto.”
