

*This lecture provides an overview of the value investing process from search strategy to valuation to investment.*

Read on his Web-site his buying criteria. You want to learn this process. A part of what Buffett has done is offer a *tax dodge*. A private company owner can sell to Berkshire in a stock for stock exchange without paying taxes and have a diversified company in exchange.

### READINGS:

The Intelligent Investor by Benjamin Graham and Greenwald's Book: Value Investing from Graham to Buffett and Beyond.

### Class Case Studies

This is a class in a *specific kind of investing*. There are two basic approaches. There are short-term investors (preferably not investing taxable money). Many technical investors who do not care about the underlying quality of the companies invest solely on price information. Although some value investors build a time element into their investments. There are investors who look at short-term earnings. Analysts spend their time on earnings' forecasting. If you think *IBM* is going to do \$1.44 vs. the analyst estimates of \$1.40, then you buy *IBM*, because analysts are behind the real growth in earnings. Your estimate is correct.

Another group, who has given up altogether, they believe the markets are efficient; they index. Unless the distribution is very skewed, then only 50% of the investors can outperform the market.

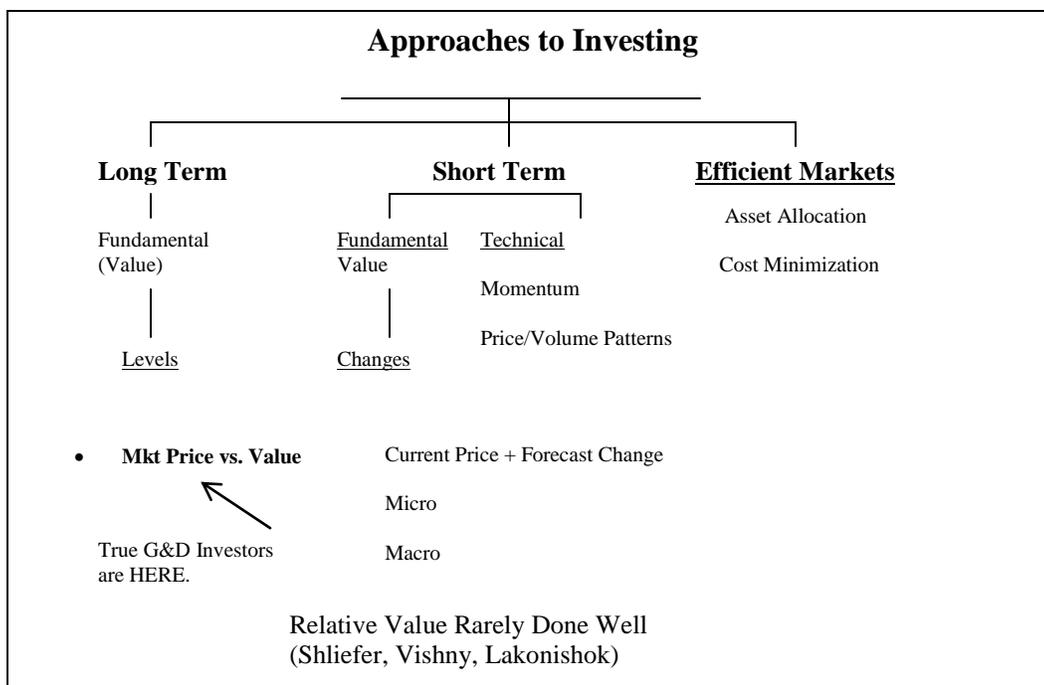
This is a market for long-term investors with a particular orientation. You look at a security and it will represent a claim on earnings and assets. What is that claim worth?

If you think that a company is worth \$22 to \$24 per share, then you look to buy with a margin of safety. When the margin of safety is sufficiently large, you will buy. You will look for bargains.

Value Investors constitute only 7% of the investor universe. There is substantial statistical evidence that value investing works: higher returns with lower risks than the market.

Value Investing ("*VI*") rests on three key characteristics of financial markets:

1. Prices are subject to significant and capricious movements that can temporarily cause price to diverge from intrinsic value. Mr. Market is to offer you various prices, not to guide you. Emotionalism and short-term thinking rule market prices in the short-run.
2. Financial assets do have underlying or fundamental economic values that are relatively stable and can be measured by a diligent and disciplined investor. Price and value often diverge.
3. A strategy of buying when prices are 33% to 50% below the calculated intrinsic value will produce superior returns in the long-run. The size of the gap between price and value is the "margin of safety."



**Essentials of Value Investing**

Long-term - Fundamental (Look at Underlying Businesses)

Specific Premises

- (1) Mr. Market is a strange guy - prices diverge regularly from fundamental values
- (2) You can buy under priced Stocks - fundamental values are often measurable
- (3) Fundamental value determines future price - Buying under priced stocks plus patience implies superior returns.

Patience helps create time arbitrage between short term focus and long-term values.

**1<sup>st</sup> Evidence:** Markets are not efficient. There is overwhelming evidence for periods going back to 1860, the markets are not efficient. Substantial evidence. 70% of professional investors under perform. It is so strong that it is almost disappointing.

The statistical approaches using value criteria *automatically* beat the market by 3%-5%. **You** must do better by reducing risk or concentrating.

Tweedy Brown: Stock Price as a Pct. of Book Value, 1967 - 1984 (from What Has Worked In Investing)

Deciles	Compounded Annual Return	Value of \$1.00 Invested on 12/31/66 at 12/31/84
1 (Lowest price as % of BV)	14.36	\$12.80
2	14.4	\$12.88
3	14.39	\$12.87
4	12.43	\$9.26
5	8.82	\$4.98
6	8.36	\$4.6

7	7.69	\$4.09
8	5.63	\$2.83
9	5.26	\$2.65
10 (Highest Price as % of BV)	6.06	\$3.06

**Over 8% difference in performance between lowest to highest price to BV!  
Buy statistically cheap stocks and sell statistically expensive stocks.**

If that does so well, why do they need you (professional money managers)? The big value firms have outperformed the market with lower variances.

**2<sup>nd</sup> Evidence:** *Lazard* and *Oppenheimer* beat the market with lower variances (less risk).

A disproportionately number of investors who have outperformed the market is similar to *Warren Buffett*. Note the investors from *Graham and Doddsville*.

From the Superinvestors from *Graham and Doddsville*:

A group of investors who year in and year out have beaten the record of the S&P 500.

225 million American coin-flip, each time the losers drop out. After 20 straights heads being flipped, there will be 215 Americans each having won \$1 million. \$225 million won and \$225 million lost. Monkeys could do the same thing, but what if the monkey all came from a particular zoo in Omaha, Neb.?

The intellectual origin: A disproportionate number of successful coin-flippers in the investment world came from a very small intellectual village that could be called *Graham-and-Doddsville*. Their only focus is on two variables: **price** and **value**.

The investors were: *Walter Schloss*, *Tom Knapp*, *Bill Ruane*, *Charlie Munger* and *Rick Guerin*. It is instant recognition--buying a dollar for 40 cents. What is the business worth?

This group assumed far less risk than average; note their record in years when the general market was weak. While they differ greatly in style, these investors are, mentally, always buying the business not buying the stock.

**Risk vs. reward is negatively correlated.**

The secret has been out for 50 years, ever since *Ben Graham* and *Dave Dodd* wrote *Security Analysis*, I have seen no trend toward value investing in the 35 years that I've practiced it. --Warren Buffet.

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We put someone (into business with a value formula that has averaged 20% plus returns over the past four years. He will be on the show, Imposter!

The preponderance of evidence is overwhelming for value investing as a good approach.

1. Statistical evidence
2. Performance evidence of big value funds (*Oakmark*, *Third Avenue*, *Fairholme*, *Tweedy Browne*)
3. Relatively episodic evidence that a disproportionately large amount or percentage of successful investors follow the value approach.

All human beings have certain *predispositions* that hurt themselves and prevent them from following the value approach.

There is a large range of potential investment stocks.

- 1.) The first assumption: **Mr. Market** is a strange guy that offers a price everyday to you—sometimes the prices are unpredictably strange. He is there to serve you, not to guide you.

Chart of a price deflated chart of the S&P: note how unstable the chart is—the extraordinary variability. The trough in 1975, then a huge upward trend.

They don't have the same pattern at the same time. Sometimes the small companies get way ahead of large companies, other times they lag. This phenomenon happens by industries, by category of stocks versus bonds. You might expect trends, but there is nothing about that relative value that is smooth. Mr. Market has tremendous variability. Huge emotional swings.

In 1990, there were extraordinary opportunities in financial stocks--a big collapse in financial stocks that have since recovered. Note the big Pharmacy stocks during *Hillary-gate*.

General Merchandise Index versus the market. It is at variance with the market. Drug companies spend long periods above the trend.

- 2.) Second Assumption: You can take advantage of price diverging from value. Market prices will fluctuate all over the lot. The psychological fact: Patience will be rewarded. There are upward periods and downward periods. The market will generate opportunities to buy.

*Ben Greenberg turned down impatient money-stupid money from Yale Endowment Fund.*

- 3.) For a subset of stocks, you can identify underlying value. Not all values are measurable by you. Not all fluctuations are crazy. You have to determine the intrinsic value to measure underlying value and to determine if there is enough of a margin of safety.
- 4.) Finally, in the long-run, fundamentally, stocks *will* return to underlying value. While true, this part of our theory is relatively weak. In the LR, markets do revert to the mean. Long-term for the market is 7 to 10 years.

As the blemish is removed (about 2 years), the market revalues upward the stock.

Individual stocks revert to the mean.

Those are the articles of faith:

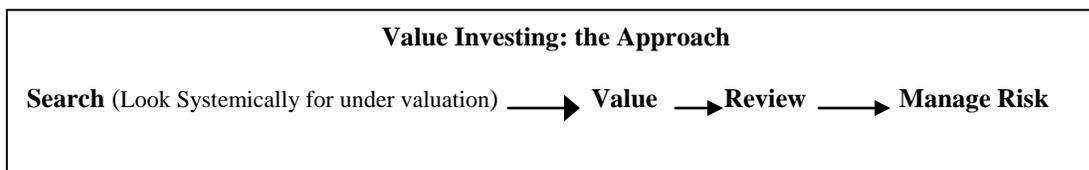
- Prices fluctuate randomly,
- You can measure fundamental value so you can determine when prices are below fundamental value.
- Ultimately, those stock prices will return to fundamental value.

There is a fair amount of empirical evidence to support that. The problem is that simple faith is not the way to go about this. You have to have a procedure. How to spend your time wisely.

### Value Investing in Practice

Long-term - Fundamental (look at underlying business)

- (1) **Look intelligently for value opportunities (Low P/E, M/B)**
  - Mr. Market is not crazy about everything
  - This is the first step not to be confused with Value Investing
- (2) **Know what you know**
  - Not all value is measurable
  - Not all value is measurable by YOU (Circle of Competence)
- (3) **You don't have to swing PATIENCE**
  - Value implies concentration not diversification. (Look for a Margin of Safety)
  - At worst Buy the Market)



There are three parts to being effective:

### 1. SEARCH STRATEGY

Look intelligently for value opportunities. You must have search strategies. Every time you sell stock, someone else is buying that security. Vast majority—95%—is selling because the stock will go down versus buying because the stock is going up. You seek a seller that is motivated by psychological imperatives other than the underlying value. *One person on one side of the trade is always wrong.*

Trust me—that will be the case (with *you*) in big tech stocks that are covered by 100s of analysts. **YOU have no advantage or edge.**

Where will I look for opportunities? Where I will be the smart one on the side of this trade? You have to decide what type of investing you want to do in this realm. In every case, they pursue in concentrated fashion a particular niche strategy or specialty within the value area.

**You have to know what you know and what you don't know.**

- Not all value is measurable
- Not all value is measurable by you.
- Where do I have the advantage?
- Where am I the smart money?

Critical for one to determine

**Great investors focus on specific opportunities in concentrated ways.** They are very disciplined by staying within their circle of competence.

I (*Bruce C. Greenwald*) used to sit on panels of money managers who managed foundations' money. Some money managers would say that they are close to *MSFT* and we know what it will do. Thank God I am not that stupid. *MSFT* is impossible to value. Much of the value is in the future of the future (think of the large amount of estimation in the terminal value of Disc. Cash Flow). 85% of the value of *MSFT* will come in the years 2010 to 2020!

How much of the investment in 2000 you get back by 2010—15%. The other 85% value of *MSFT* is beyond 2010—(2010-2020)! Lots of luck. No one can do that. Then they say they can do it for complicated companies like *Citicorp* and *GE*? Forget it.

Understand what valuations are fundamentally impossible. Stay away from those glamour stocks.

**If you try to be an expert in everything, you will be an expert in nothing.**

You can specialize in small stocks, highly complicated situations, or a specific industry or country.

When you say you know what it is worth, you better know better than the rest of the investors in the community.

## 2. VALUATION STRATEGY

You want an approach, a valuation procedure and a discipline that will *restrict* you to making decision on the basis of what you really know. You are betting against the person on the other side of your trade. Where is your edge?

## 3. PATIENCE

You have to be patient. Mr. Market throws a pitch every day, but you only have to swing at the ones that are in your sweet spot. THE FAT PITCH IN YOUR STRIKE ZONE.

Patience is rewarded especially when you are on the other side of impatient money.

### The BAD NEWS:

They run up the score whether you swing or not, and you are being judged by the other scores. You are being judged *relative* to the market.

What is your default strategy when there is nothing to do? Buy the market in an index fund vs. cash. What does the absence of opportunity tell you?

If you think DCF is the best way to value companies, then you will have a problem.

In practice, you want to look intelligently for value opportunities, a valuation strategy that identifies what you really know, and you want an appropriate default strategy for managing risk.

All the elements have to be in place. Valuation strategy must be appropriate to your search strategy. You always have to track what you do. Have you lost money on this type of stock before? If you have made a mistake before, be aware of it. Be aware of the market and what other intelligent investors are doing. If you think *Wells Fargo* is overvalued, you want to think carefully about selling if Warren Buffett is on the other side.

### Reviewing these judgments.

How do you manage risk? How do you put together a portfolio? A more concentrated portfolio requires better patience and valuation. Think about the underlying economic reality.

In general, stocks have outperformed all other assets. Default strategies and investing in indexes and having a balanced strategies. One value investor said cash was better than an index strategy. Test: Read through great value investors' letters when they have mostly cash vs. having the money in an index over the next three years, the results were so discouraging to his hypothesis. The index outperforms cash.

In 1986, *Bill Ruane* went into cash and thought the market was over-valued. Think of an equity bias.

Another lesson, you can hedge out the risk of the stock market as a whole at a low price. Historically, that has not been a good strategy. Look at the market as a whole and it would influence your allocation between cash and an index.

When you look at stocks—there are two ways to compute anticipated long-term returns.

1. I get the dividends from the S&P, which in 2000 was about 1.5%. In addition to the dividend, I get capital gains. In the long run, the balance between profits and GDP has varied in a narrow range. So LR growth in profits, which presumably drive the LT growth in stock market value, will equal the LR growth in World GDP. In 2000, that number was about 5% in nominal terms. In 2000, 1.5% in dividends and 5% in capital gains for about 6.5%. Surveying investors, they thought returns would be about 17%-21% a year—a big gap between reality and expectations.

Another way, get the earnings if they are honest. In 2000, the P/E was 25 or  $1/25 = 4\%$  and in addition inflation over time will drive up the real price of assets for 1.5% per year or 5.5% for an average over the 2 methods of  $6.5\% + 5.5\% = 6\%$ . Investors expected 19% returns.

Corporate Bonds were at 6% to 7%. Historically, stocks yielded 11% while bonds 3.5%. That is a huge gap. Stocks were at 6% and bonds were at 5%.

Do that calculation yourself today. If you do, you will see that stocks and bonds yield both more than short term rates. But the difference between the two is nothing like it has been historically. The perspective return on the stock market as a whole is maybe 6% to 7%. The same is true for corporate bonds. Under those circumstances, you may want to start hedging out your risk in the stock market (Today—Jan 22, 2004).

You may be taking on too much risk in stocks today.

If you do this calculation where stocks are yielding 9% to 11% compared to bonds are yielding 6% - 7%, then you want to have a bias towards stocks.

Stocks as under-priced Assets	
Stocks historically outperform bonds, etc. Stocks are not that much more risky	
But today (1999).....	
Stocks: $E/P = 4\% + 1.5\% = 5.5\%$	vs. 11%
Inflation	Historical
↑	↑
Bonds: 5% vs. 3.5% at comparable inflation rates. Notes: 4.5% vs. 2%	
Stock Under valuation not so clear.	

Adjust your attitudes as an equity investor; you want to think about these sorts of numbers. Once you have done that and you have either decided to hedge out or not the market risk. What sort of search criteria do you want to use?

#### SEARCH CRITERIA: WHERE ARE THE UNREFLECTIVE SELLERS?

Search Criteria
<ul style="list-style-type: none"> <li>• <b>Obscure:</b> Small Caps, Spin-offs, Post Bankruptcy, Boring with low analyst coverage</li> <li>• <b>Undesirable:</b> Financial Distress, Bankruptcy, low growth, low P/E, Low M/B, Industry problems (bad loans, regulatory threat, overcapacity). Company problem (lawsuit, poor subsidiary performance, poor year). Disappointing (Long-term Underperformance)</li> <li>• <b>Other Supply, Demand Imbalance - RTC, Privatizations, Index Deletions</b></li> </ul>

Where are the unreflective sellers going to be on the other side of the trade? Where the stock is obscure, where it is a small cap because the stock has fallen a lot, analysts leave, the big investors don't find it worth their time. Little competition for analyzing the company.

Spin-offs are that way. Unreflective stocks.

**Most investors are in it for the excitement.** When the stock has been depressed for a long time, people will sell to get out of it. Investors don't like to hold ugly stocks anymore than having ugly pets. Boring and obscure and undesirable are your friends. Ugly is usually oversold. Financial distress and bankruptcy and low growth are fertile areas for hunting.

*Industry problems* are your friend as long as you know **the industry is viable**. The auto industry as much trouble as it is in now, it won't go away. Look for over-sold industries.

- Regulatory threats, bad loans, over capacity
- Company problems, bad year,
- Subsidiary problems, lawsuits
- LT underperformance and disappointment
- Supply/Demand imbalance: RTC dumping indiscriminately, Eastern Europe dumping privatizations.
- Complicated –undesirable.

Look for a place where you have the advantage in knowledge or intestinal fortitude.

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Now, I will show you the statistical data that underlies our assumptions.

What is an *event study*? This study by Richard Thaler: they bought the worst and best stocks in 10% deciles and after one year, then they tracked it for the following 36 months.

Do this every two years, the stocks that did poorly over two years and those that did best over two years—if you did that you would outperform the market by 10%.

**Really disappointing performance is what you seek. Deep value.**

Search strategies:

*Loss* for sure biases you and other investors.

### **Institutional biases**

Search for disappointment, cheap, obscure, supply/demand imbalance, undesirable, less well-informed.

You have to resist reading the short term fluctuations, the *Jan. Effect* is most pronounced for the most beaten down stocks. The chart is the difference between the bottom 10% and the top 10% of stocks. This is a long/short portfolio not a market portfolio.

These guys are interested in long-term investing. If a stock has been disappointing, it will have capital losses; there will be selling at the end of the year.

You are not looking for stocks down 40% today; you hunt among disappointing stocks for at least two years of disappointment.

2<sup>nd</sup> study by the *Dean Fama*, the high priest of efficient market theory. At the beginning of each month, they pick the highest book to market and the lowest book to market. At the same time, they looked at smallest to largest market capitalization.

For 27 years. The glamour stocks returned 7-8 percent in a generally rising market. The low market to book stocks are generating 20 percent. **Roughly a 1/3 of the difference in performance is avoiding the big glamour stocks. Avoid Big Mistakes.** When we talk about cheap, we are talking about the bottom deciles (bottom 10<sup>th</sup>) not the bottom third—the real dogs of the market.

The small stocks returned 1.27% while the large returned 0.89%. You have to judge company by company. **This research tells you where the bargains are.** You want the tiny little stocks, not the large stocks. **Just by shorting the most glamorous stocks and buying the beaten down micro-caps, you would outperform the market by 10%.**

Investors *love growth*. Top third in growth and highest price to cash flow ratios, those stocks underperformed the market by 3.4%. The opposite outperformed the market by 5.5%--so the total is about 9% out-performance. So average out-performance by 4%.

If that was all there was to it, then You (as a money manager) wouldn't be necessary. But there are two things that you can bring to the table:

1. A valuation discipline to weed out among these computer generated stocks, which really are low risk and good companies. We will talk about that next time.
2. When you identify a statistical irregularity, you want to be able to explain it with an enduring rationale to individual and institutional behavior. In other words, why does it exist and persist?

### Systemic Biases

(1) Institutional

- (A) Herding - Minimize Deviations
- (B) Window Dressing (January Effect)
- (C) Blockbusters (own the "homerun" stocks).

(2) Individual

- (A) Loss Aversion
- (B) Hindsight Bias
- (C) Lotteries

#### **Institutional Bias**

1. Herding

A variety of behavior, which would account for undervaluation or overvaluation. Institutional Behavior: is the herding effect. You don't want to be alone in owning a bad mistake. Me-to managers will jump on the bandwagon as other people buy and drive stocks up to high P/Es.

2. Window-Dressing

Another phenomenon is window dressing—get rid of your dogs or mistakes. Buy the best acting stocks.

3. Blockbusters

People love to talk about their big successes and bury their mistakes. People will be overly focused on looking for the next blockbuster stock like Microsoft. You want to be on the other side of their trade.

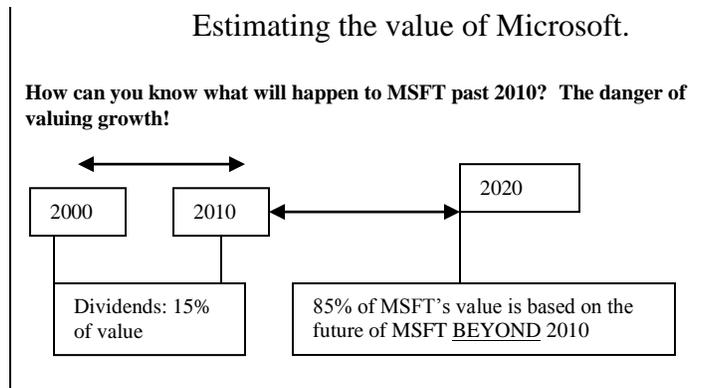
**The Individual Effect:**

1. People think they know what is going on. They *don't remember* what they really did. They forget their mistakes. The estimates were all over the lot, but they still said that they knew where the square was (a study). What they know may not be true; they will continue to over-invest in MSFT.
2. People like to buy lottery tickets and get rich quick—that is why people love buying glamour stocks.
3. Loss aversion—people hate losing. People will gamble to avoid a sure loss. People will take on more loss to avoid a sure loss. Taking on risk, they ordinarily wouldn't take on.

You want to take the other side of a trade from these less rational people.

Set up a data collection and search strategy to find disappointing, cheap stocks or where there is a temporary supply/demand imbalance. You want a less well informed, less rational person than you on the other side of the trade.

Once you pick a candidate, how do you value this candidate to know what you know? This will be the focus of the next class. Feb. 6<sup>th</sup> there will be a value investing panel at CIMA.



**END**